Why Unity's Imperative On Work Rules Issue - p. 42

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RAILWAY AGE *weekly*

↑ P&WV report - - composition shoes are a hit

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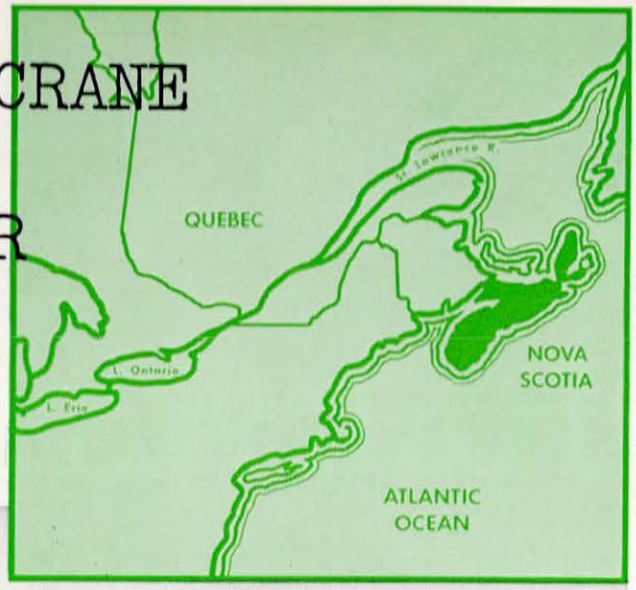

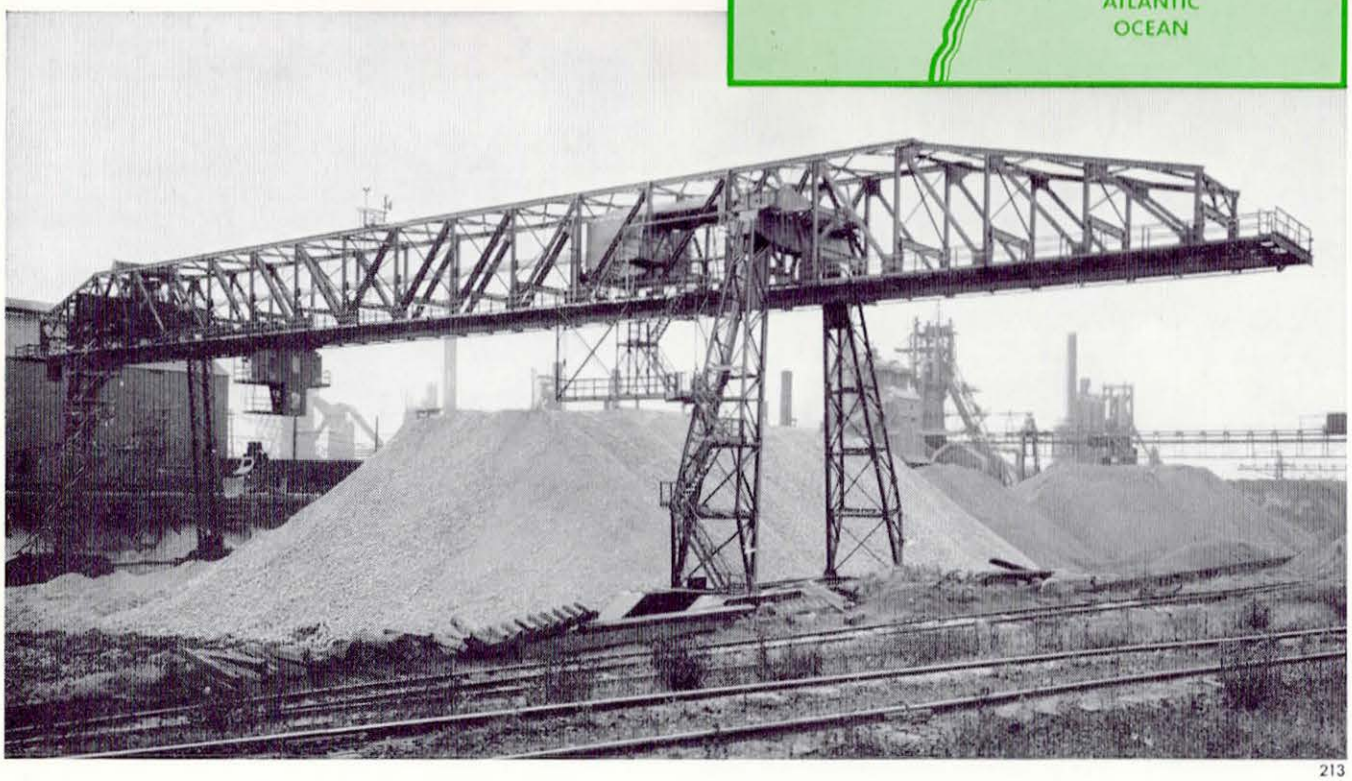

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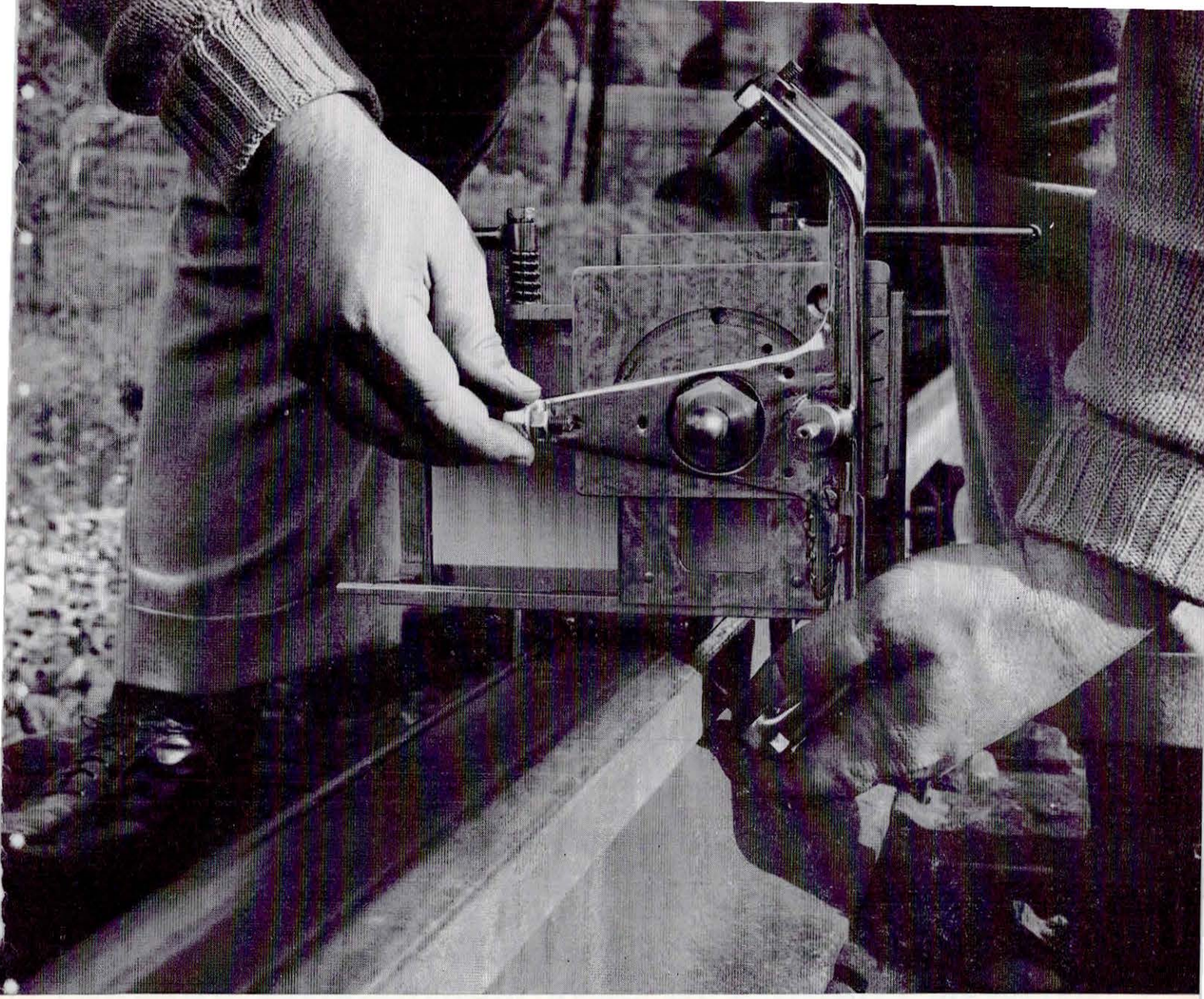

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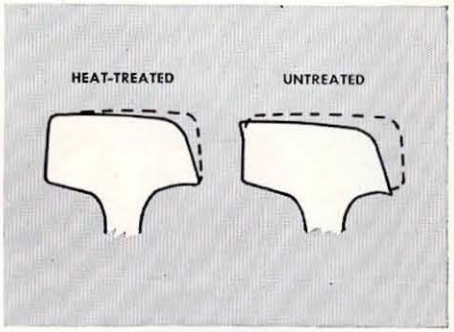

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RAILWAY AGE *weekly* November 9, 1959 • Vol. 147, No. 19

Week at a Glance

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What top PRR change means ..... p. 9

The Pennsylvania's announcement of a switch in its top management left a lot of questions unanswered last week. In an interview with Railway Age on the day he assumed his new job, PRR President Allen J. Greenough gave some of the answers. Here's what he had to say.

Rules proposals arouse unions p.10

Reaction of labor leaders to management's demands for sweeping revisions of working rules has ranged from bitter to mild. BLF&E President Gilbert says the carriers want to maintain "record profit levels" by "shoving thousands into unemployment lines." BLE President Brown thinks the proposals "could have been worse."

How to reduce crosstie costs p.18

Several areas of potential savings—including standardization—were explored at the recent convention of the Railway Tie Association in Cincinnati.

Cover Story—RRs plan concrete-tie tests p.20

Proponents of concrete crossties say they'll last longer and cost less to maintain than wood ties. Tests planned by the Seaboard and the Coast Line will be watched closely by the industry.

Cover Story—P&WV likes composition brake shoes p.26

Among other advantages, says the road, composition shoes last four times longer than metal shoes. All P&WV locomotives are now equipped with composition shoes. The changeover required close cooperation between the operating and mechanical departments.

New consolidated code ready p.34

Here's a rundown on the new Consolidated Code of Operating Rules 14 western roads are adopting Dec. 1. Technological improvements have resulted in a number of changes. For one thing, the engine crew rules no longer mention the job of locomotive fireman.

The Action Page—Why unity's imperative on rules issue p.42

The present working rules in the railroad industry are as out-of-date as a horsedrawn buggy. The rules can, and must, be changed by railroad men themselves—management and unions. Only by such unity can the industry's traffic, and employment possibilities, be protected.

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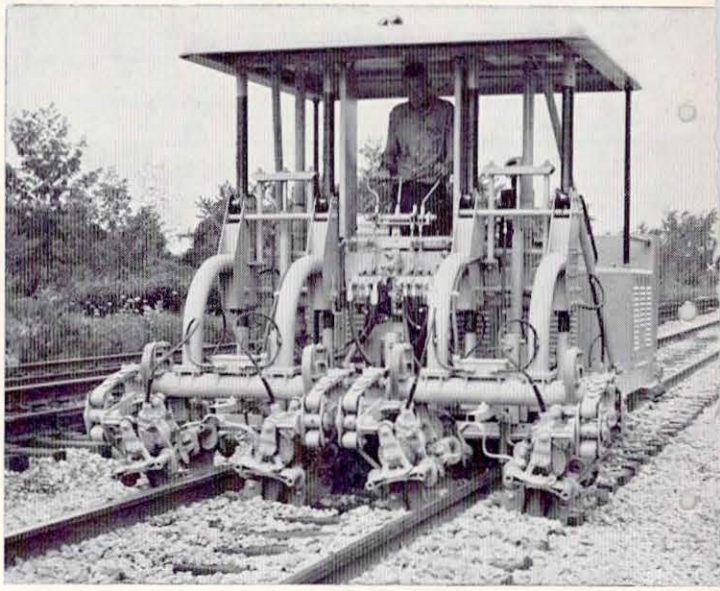

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Week at a Glance CONT.

Current Statistics

Operating revenues	
9 mos., 1959	$7,391,129,587
9 mos., 1958	7,013,191,462
Operating expenses	
9 mos., 1959	5,807,048,048
9 mos., 1958	5,613,195,989
Taxes	
9 mos., 1959	792,949,896
9 mos., 1958	685,984,463
Net railway operating income	
9 mos., 1959	548,669,818
9 mos., 1958	448,671,909
Net income estimated	
9 mos., 1959	393,000,000
9 mos., 1958	353,000,000
Average price railroad stocks	
Nov. 4, 1959 ...	104.36
Nov. 3, 1958 ...	99.14
Carloadings, revenue freight	
43 wks., '59	25,624,208
43 wks., '58	24,901,471
Freight cars on order	
Oct. 1, 1959	35,626
Oct. 1, 1958	24,982
Freight cars delivered	
9 mos., 1959	29,916
9 mos., 1958	34,664

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Short and Significant

Railroads suffered two defeats at the polls . . .

in the East last week. New York voters approved an amendment (opposed by the State Association of Railroads) authorizing transfer of the 527-mile New York Barge Canal system to the federal government. New Jersey voters rejected Gov. Robert E. Meyner's plan (supported by the state's railroads) to divert New Jersey Turnpike surpluses to commuter aid.

New Jersey railroads met Nov. 6 . . .

to consider the next move in their acute problem of commuter-service deficits. Their topic: other possible alternatives to service abandonment. Also stressed: appreciation of the fact that over 600,000 of New Jersey's voters were on their side.

C&O has started Railvan service . . .

on Trains 14 and 15 between Grand Rapids and Detroit, Mich. Two combination rail-highway vehicles will make the 304-mile round-trip daily except Sunday. C&O's first regular Railvan service began last May between Grand Rapids and Traverse City. Further expansion of the operation, to include other system points, is under study.

September's estimated net income . . .

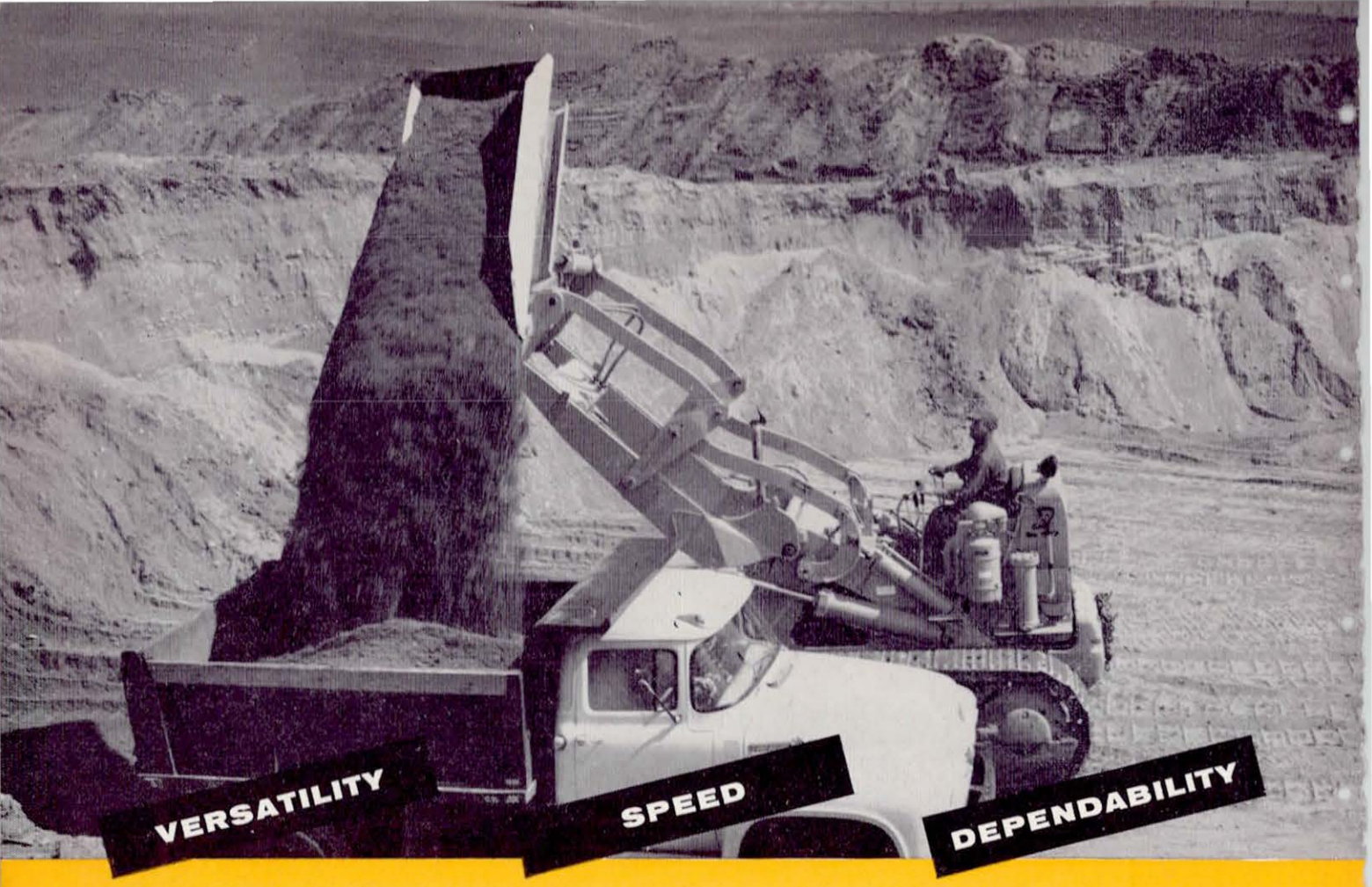
of Class I railroads was down $43 million from last year—$30 million compared with $73 million for September 1958. The AAR statement also shows that the estimated net for this year's first nine months was $393 million, up $40 million from the $353 million reported for the same period of 1958. Rate of return for the 12 months ended with September was 2.98%.

Latest reported beneficiary of the Seaway . . .

is the Venezuelan oil industry, which just landed a 55,000-bbl cargo of crude at Fort William, Ont. The shipment is admittedly a test operation, but it brings foreign oil almost to the very edge of Canada's own oil fields, whose proprietors are described as raising "loud outcries."

Nearly $17 million in unemployment benefits . . .

went to railroad employees furloughed by the steel and copper strikes up to mid-October, according to Thomas M. Healy, management member of the Railroad Retirement Board. The AAR, meanwhile, estimates that the railroads as of Nov. 1 had lost 2,495,000 carloads of revenue freight as a result of the steel strike.



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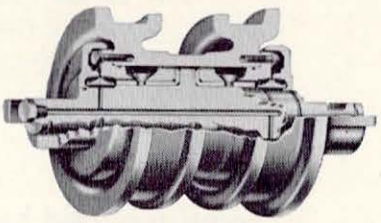

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NAME THE DATE... YOUR DEALER WILL DEMONSTRATE

What Top PRR Change Means

At 9 o'clock last Monday morning Allen J. Greenough began his first full working day as president of the Pennsylvania Railroad. At 10 o'clock he sat down with Railway Age Executive Editor Joe W. Kizzia and Publisher Robert G. Lewis to talk about his new job.

Q. Mr. Greenough, there's speculation in the industry about the exact role you will fill here, as president and chief administrative officer, while Mr. Symes retains the role of chief executive officer and chairman of the board. How will this operate on a day-to-day basis?

A. It's a little early to give you a complete answer. We've only had one brief meeting so far. Generally speaking, Mr. Symes, as you know, has to spend a great deal of his time with policy matters, and he's also been very active in seeking answers to industry problems. Under this new setup he will continue those things while I will be concerned with the day-to-day administrative duties of running the railroad. It's a case of dividing up the work load.

Q. Your arrangement, then, will be roughly similar to that which General Motors established after Harlow Curtice retired?

A. Yes, quite similar to that.

Q. When the Board of Directors announced these changes, they called them "a further development of the road's management organization." Where does this program go now?

A. This about completes it. We started in 1955 by setting up our regional organization, with the nine regions, and made some further changes early in 1958. This rounds it out.

PRR President Greenough as he assumed his new job last week.

Q. You were formerly vice-president, transportation and maintenance, a job now filled by Mr. Roeper. What is the distinction between this position and that of operating vice-president, Mr. Newell's position?

A. Well, under our present setup, the operating vice-president works directly with the various regional managers. He's the principal point of contact for most of their dealings with system headquarters. The transportation-maintenance officer is more a staff man. When my former position was established in 1955 it was to coordinate operations and engineering. Mr. Roeper will continue that work.

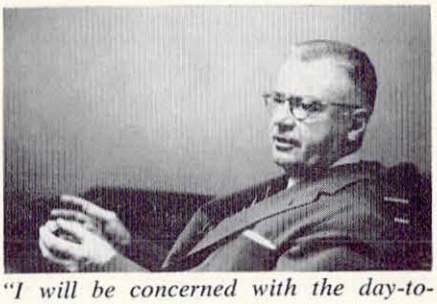
Q. The regional organization, I take it, has substantially altered the operating function, as compared with most other railroads?

"We're going ahead with mechanization as fast as we can absorb it . . ."

A. Yes. Our size helps make the situation different. System operations were one thing, when we had three regions. With nine, it's a lot more difficult. We knew when we made the big changes four years ago that they would increase the effort required at system headquarters, particularly in coordination, because we were wiping out a whole layer of intermediate authority.

Q. Mr. Greenough, some newspapers have interpreted your appointment as meaning that service and maintenance will be getting increased attention on the PRR. Is that correct?

A. Well, I wouldn't attach any significance to that idea. As of the present, we anticipate no change in the company's general policy on these points. If there's any significance, it's more



"I will be concerned with the day-to-day administrative duties . . ."

along the line of your first question or two. You may recall, also, that Mr. Symes has often said he intends to retire at 65. I don't mean to speak for him, of course, but with this new setup the railroad does have a backstop, just in case.

Q. Would you be willing to comment on the "state of the railroad" as you begin this new position? What about your present maintenance programs, for instance?

A. You're speaking there of a matter of $250 million to $300 million a year. This year we'll spend about $90 million on maintenance of way, another $180 million on equipment. It's quite a lot of money, and how to spend it is very important. Our program is certainly not out of line, considering our income.

We're going ahead with mechanization as fast as we can absorb it. We lease and buy equipment, both. But it takes time just to train people. Equipment maintenance doesn't lend itself so readily to mechanization, but we're doing all we can in that area, adopting new methods and tools whenever we can.

Q. Speaking of equipment, there's much talk in the industry these days about specialized rolling stock. Where does your road fit in this?

A. There's no question but what railroads, including the Pennsylvania, are going to have to meet this problem. We have a lot of this equipment now, for bulk flour, carbon black, wallboard, things like that, and we've made commitments which are not likely to be the end of it. I'm sure we're going to have

(Continued on page 15)

Rules Proposals Arouse Unions

► **The Story at a Glance: Rail management and labor have begun following the inexact timetable for collective bargaining which can lead to a settlement—or a strike—on the work-rules issue.**

Service of the carriers' sweeping rules revision proposals Nov. 2 provoked immediate—and in some cases bitter—reaction from leaders of the operating brotherhoods. Only one organization (SUNA), however, expected to file its own rules notices immediately. Three unions—the BLE, ORC&B and BRT—have slated meetings of general chairmen later this month to study carrier demands and formulate counter-proposals. The fifth operating brotherhood—the BLF&E—has placed the matter in the hands of a policy subcommittee.

To an extent, union reaction to management's work rules demands has varied according to whose ox is being gored most deeply.

The BLF&E faces elimination of firemen from freight and yard service. Brotherhood President H. E. Gilbert termed carrier proposals "inhuman and unrealistic."

The BLE isn't particularly threatened with job elimination. Grand Chief Guy L. Brown took a milder approach. Management proposals didn't surprise him and, in fact, "they could have been worse."

All in all, it was an eventful week for labor-management relations:

- The RLEA kept busy drumming up support for its railroad worker rally in Chicago Nov. 5. AFL-CIO President George Meany and BRC President George M. Harrison headed the list of scheduled speakers.
- National Mediation Board efforts turned to the non-ops' vacation-holiday demands—which, apparently, will be the only "rules" program involving the non-ops in this contract go-round.
- Operating unions completed plans for summoning the general chairmen. The schedule for meetings: BRT, Nov. 11 in Chicago; ORC&B, Nov. 18 in Cedar Rapids, Iowa; BLE, Nov. 19-20 in Chicago.
- Brotherhood chiefs showed no inclination to combine the rules dispute with the wage negotiations already in progress. W. P. Kennedy, BRT president, said the unions want the wage notices to be handled without delay. James A. Paddock, ORC&B president, said that any attempt to combine the two disputes would be "erroneous," since the wage issue is industry-wide and the rules fight affects only the running crafts.
- Both management and labor spokesmen agreed that there's little chance of national handling of the rules dispute beginning before January. Under the Railway Labor Act, preliminary conferences on individual properties must be held within 30 days of service

(Continued on page 17)

Watching Washington *with Walter Taft*

• **THERE'S A NEW REPORT** on transportation which talks sense. It's been published in Washington by American Enterprise Association, a self-styled "nonpartisan organization which studies national policy problems."

THE AUTHOR is Dr. John H. Frederick, professor of transportation at the University of Maryland. In clear and concise fashion, he identifies major transportation problems which have become increasingly critical since the end of World War II. He follows through to come up with sound recommendations for transport policy changes.

PROBLEMS dealt with include those arising from inadequate earnings which leave carriers unable to obtain equity capital, subsidies which divert business from more economical to less economical modes of transport, featherbedding, and outmoded policy and regulation.

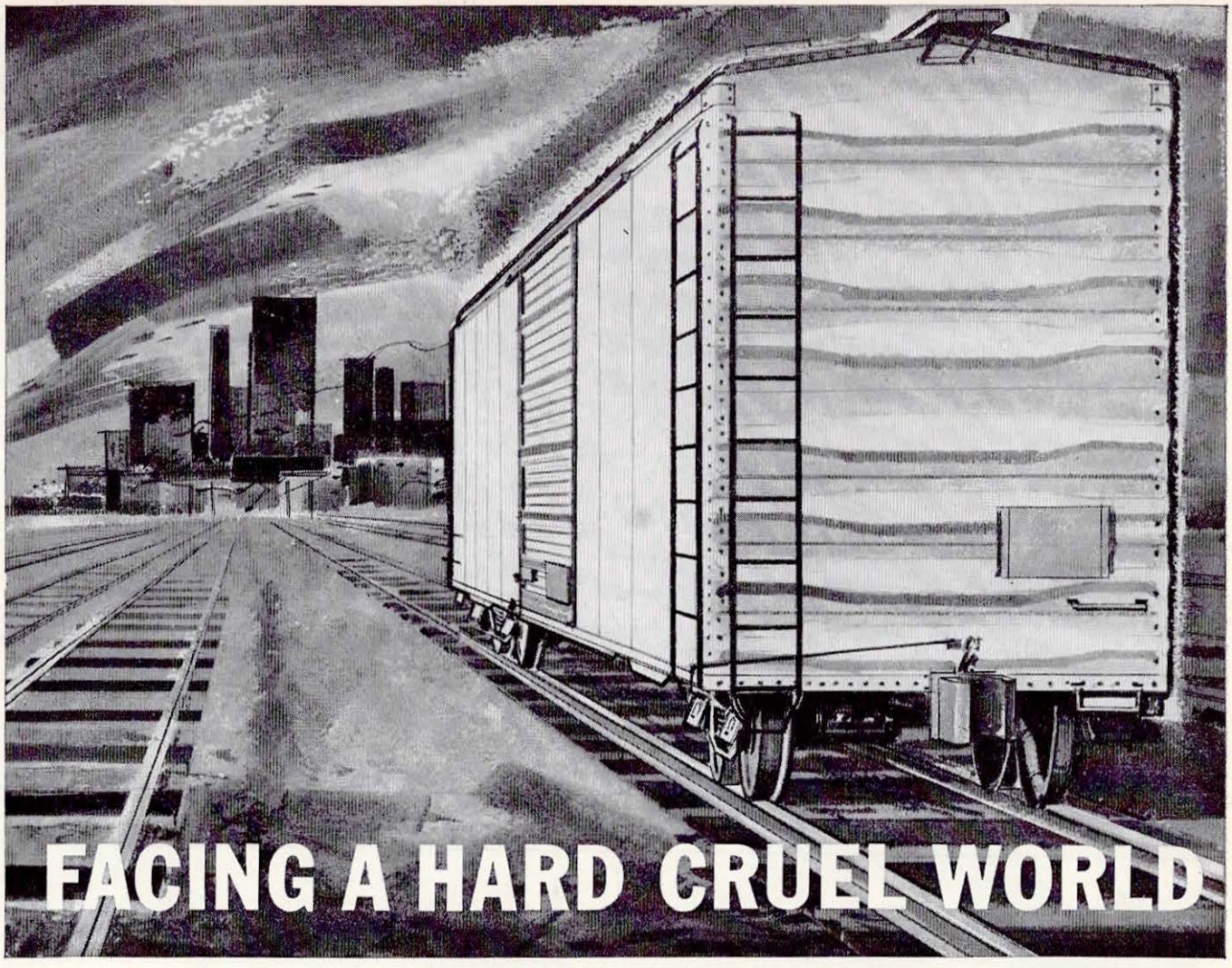
REAPPRAISAL of the government's transport promotional policy is called for. If promotional activities are to be continued, all media should be placed on an adequate-user-charge basis, Dr. Frederick says. This would require rates of airlines and highway and water carriers to reflect all costs of providing services offered. It would mean no essential change for railroads, because, as Dr. Frederick recognizes, "rail service is already financed on a user basis."

RATE REGULATION like that of the past is found to be no longer necessary. What the ICC has done thus far in the way of interpreting the 1958 Transportation Act's rate-freedom provisions means to Dr. Frederick that "there is still much to be done to bring rate regulation more in accord with present transport conditions."

MINIMUM PRICES, he argues, should be those below which a carrier "would be worse off if it took the traffic." If this test is met, he rejects the idea that public policy should be concerned further with protecting rival means of transport. He says it should be concerned only with preventing carriers from publishing competitive rates "which do not add to their net revenues . . ."

DIVERSIFICATION, which means freedom for one type of transport to operate other types, is also favored by Dr. Frederick. The railroad industry's call for such freedom is a major proposal in its legislative program.

THE REPORT SAYS diversification "could slow down the process of attrition by which common carriers now lose so much of their traffic, and it might well provide the public with better service under many circumstances." Coordination through joint rate and route arrangements is appraised as an inadequate substitute—because "coordination up to the present has been beset by suspicions between competing modes and this is likely to continue."



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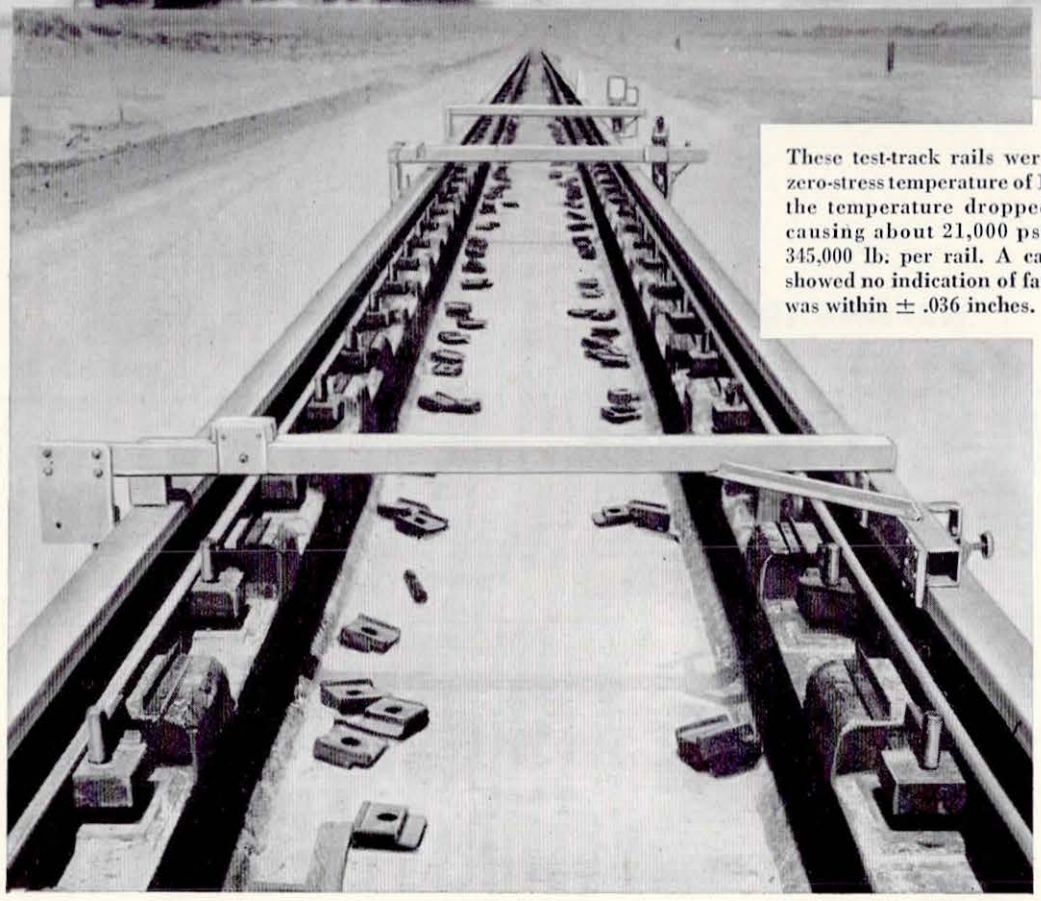

These test-track rails were installed for a zero-stress temperature of 115°F. One night, the temperature dropped to 10° above, causing about 21,000 psi in tension, or 345,000 lb. per rail. A careful inspection showed no indication of failure. Alignment was within ± .036 inches.

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Where Has Hot Box Odor Gone?

Conducted by George C. Randall, district manager, Car Service Division, retired, this column is a forum for questions being discussed on railroads today. Questions and answers are welcome from readers at all levels of responsibility. We'll pay $10 to any reader submitting a question that forms the basis for a column discussion.

Where Has Hot Box Odor Gone? was raised by a trainmaster who found that crews on today's trains seldom get the distinctive smoke and smell that used to be characteristic of hot journals. He wonders if an additive to journal oils that would cause noticeable smoke and odors would be desirable or feasible, or both.

"In connection with journal heating: It is a fact that there is some doubt in our mind as to the amount of smoke being emitted by hot boxes. Also, the question of the odor has caused some comment, although my personal opinion is that train service employees occasionally fail to maintain sufficient alertness, so that the odor question may not be valid.

"The use of an additive in journal oils might be of some use. But anything of this kind that is used is an attempt to correct a situation that has already occurred, i.e., the journal heating has already taken place. It would appear that the best thing to do would be to continue to devote all possible efforts to the prevention of the journal heating in the first place." [These comments are from a reader with wide experience in the operating department, who prefers to remain anonymous. *G.C.R.*]

"In response to questions raised by one of your correspondents as to whether modern journals give off smoke and a distinctive odor when overheated and whether the use of an additive in journal oils to emit distinctive smoke and odor would be feasible:

"We have the following comments to offer on this subject:

"The materials used in modern journal lubricating devices, in general, produce very little smoke and odor when overheated in the journal box assembly, compared to that previously encountered when waste packing was used exclusively. Furthermore, with the tighter fitting rear seals and lids of journal boxes there is a tendency to suppress the emission of smoke or odor when a journal box assembly becomes overheated. It is not the matter of odor of the oil as much as the fact that the combustible material in lubricating devices gives off less smoke and odor when overheated.

"The matter of using additives in journal oil that would emit both a distinctive smoke and odor when overheated is one which would have to be explored chemically to determine whether the use of such additives would have a deleterious effect on the oil as a lubricating medium. Furthermore, on account of the small amount of free oil normally available in the journal box, it is questionable whether additives in the journal oil would be of much value in producing an effective smoke and odor warning in the event of an overheated journal.

"In this connection, the Research Department of the AAR is working on the development of an inexpensive hot box detector which, it is understood, would be placed in the dust guard well of the journal box in such a manner that a distinctive odor and a considerable amount of smoke would be emitted in event the journal box assembly becomes overheated. This may develop into a practical warning device for an overheated journal bearing and prove more effective than the suggestions advanced by your correspondent.

"An excellent method for detecting hot boxes is a device known as the Servosafe Hot Box Detective manufactured by Servo Corporation of America. This device is located along the trackside and produces a record which pinpoints the location of overheated journal boxes. We are presently installing a number of these devices on the Pennsylvania. [RA, Mar. 16, p. 24]. In addition, instructions to our employees require them to be vigilant in observing trains for the purpose of detecting hot boxes."—*J. P. Newell, vice president, operations, Pennsylvania.*

Should Fixed Retirement Age Be Set?

"Re your article of October 5, headed, 'Should Retirement Age Be Set?' at 65, I would like to express my opinion that it should not.

"In reply to R. F. Schilp's statement suggesting full pension after 30 years of service, or similar plan of armed forces, which I believe is 20 years, I would like to ask who is going to pay for this dream plan. The Railroad Retirement Board claims that if pensions would be allowed after 30 years of service, employees' premiums would amount to at least twice as much as is now paid.

"I do not believe retirement age should be set at 65 years, for the following reasons. Some employees are in better physical and mental condition at 65 than some younger employees. At the present cost of living, those in the medium and lower wage brackets cannot put away any amountable sums of money for retirement. Certainly retirement pensions ranging from $140 to $170 are not sufficient to support an employee and his wife used to living in a $300 to $450 salary range. Just because a man retires does not mean he has to give up living. He still wants to enjoy running an automobile, trips and some clothes. If an employee can afford to retire, because of having some supplemental income, then by all means he should retire. Retirement at 65 should not be forced on an employee who is well and able and enjoys his work.

"I believe the present plan is reasonable with the provided option."—*M. N. Greene, superintendent car service, Minneapolis, Northfield & Southern.*

WHAT TOP PRR CHANGE MEANS *(Continued from page 9)*

to move more and more into this kind of thing to remain competitive with trucks and other forms of transportation. The answer will probably lie in sharing the costs of such equipment with the industry concerned, each paying proportionately for benefits received. It is, after all, a two-way street.

Q. Would some sort of pool operation for such equipment be feasible, with different railroads working together the way they do in Trailer Train Company?

A. This is a definite possibility. You have something close to that now in your reefers.

Q. Let's go back to this matter of service. How has Conway Yard worked out, now that it's finished?

A. We're absolutely satisfied; it's doing just what we figured it would. We had to make a few changes, minor ones, between the time it was planned and the time it was finished, but we're happy with it. We block cars there for western connections, of course, and it saves time at the gateways.

Q. What kind of changes were these that you mention?

A. Well, for example, when we originally planned the yard, all the iron ore came down the Lakes. Now a lot comes in from foreign sources. We made some adjustments to meet this changing traffic situation. They were minor things.

Q. Since Conway works so well, does the Pennsylvania have plans for another new yard?

A. We do and we don't. We have several areas that need attention, places like Baltimore, Cleveland, and the Chicago-New York situation. But we're not moving on any of them at the moment. There are just too many imponderables, we think. The future of piggyback, for example. We don't know how big it will get and we don't want to close any doors. That might happen if we go ahead now.

Q. You think piggybacking will get that big that fast?

A. I certainly do. We've hardly scratched the surface.

Q. Mr. Greenough, there are two other areas we want to ask about. Do you have any specific plans relating to freight sales, and how do you feel about the future of your passenger business?

A. I can tell you about freight sales very quickly. I've had little experience with that function, and wouldn't want to comment about it at all at this point. I do feel, as a general rule, that the old concept of charging what the traffic will bear is finished, but how we can move to replace that with something else — that's the problem. Obviously, this matter of adjusting rates and pricing is one of our most critical areas.

The passenger situation, as I see it, is really two different problems—commuters and intermediate-long distance. Commuters are going to be around for a long time yet, whether we want them or not, and it seems to us that some measure of assistance from the communities and states is necessary. The intermediate and long-distance passenger train is something else again. We've made a number of studies of our New York-Washington service, for example, and we think there's a good chance that we can work something out on a run like that.

Month's Wage: $850—Plus Benefits

A new slant on legal featherbedding has cropped up on the Chicago & Eastern Illinois—where an employee who earned $850 during a recent month also qualified for $40.80 unemployment compensation during the same month.

The paradoxical situation, C&EI President David O. Mathews notes, has developed as a result of the 1959 amendments to the Railroad Unemployment Insurance Act. Moreover, the road points out, the Railroad Retirement Board has ruled that an engineer is entitled to unemployment compensation if he operates less than 1,400 miles during a 14-day period. Here's how the law and the interpretation have been applied on the C&EI:

Over the first 14 days of last June, one of the road's extra engineers (regularly assigned to the extra board) worked 1,321.2 miles. According to the RRB, this made him eligible for unemployment benefits.

Actually, the engineer worked six days out of 14, for which he was paid gross compensation of $283.16. The law, as recently amended, provides that an employee must wait four days before claiming unemployment benefits. The RRB ruled that this four-day waiting period should be deducted from the eight days the engineer didn't work. Thus he was paid four days' unemployment benefits—$40.80 at a rate of $10.20 per day.

Starting with the 15th day of the month, the same engineer earned gross compensation of $567.67 through June 30. His gross for the entire month: $850.83 from C&EI; $40.80 from unemployment compensation.

Ironically, C&EI adds, the railroad was taxed $15—3¾% of the employee's first $400 in wages—as its unemployment account contribution on the engineer's compensation. The tax, the road observes, "is designed to provide a fund to alleviate the shock of unemployment. Yet here the law operates to pay $40.80 to a railroad employee for a month during which [he] received gross compensation of $850.83 from the C&EI."

An isolated case? Not on C&EI. Pending are 22 similar cases.

As the Publisher Sees It . . .

Rode one of my favorite railroads the other day and had lunch in the dining car. It shimmied so severely that coffee just wouldn't stay in the cups. My waiter was pre-filling the cups about one-third, and warning his customers to be careful—"this car rides awful rough today."

I asked the steward about it and he produced a car card that showed the condition first reported on Oct. 5, and daily up to Oct. 14. What more could he do, he asked.

Well, during those nine days this car has served "roughly" 2,000 passengers. It's going to have to be repaired pretty soon. When it is repaired the cost will be just what it would have been a few weeks ago, plus approximately 2,000 passenger-mad-hours. Here is a statistic that ought to be considered if remaining passenger services are expected to earn maximum revenues.

Robert S. Lewis

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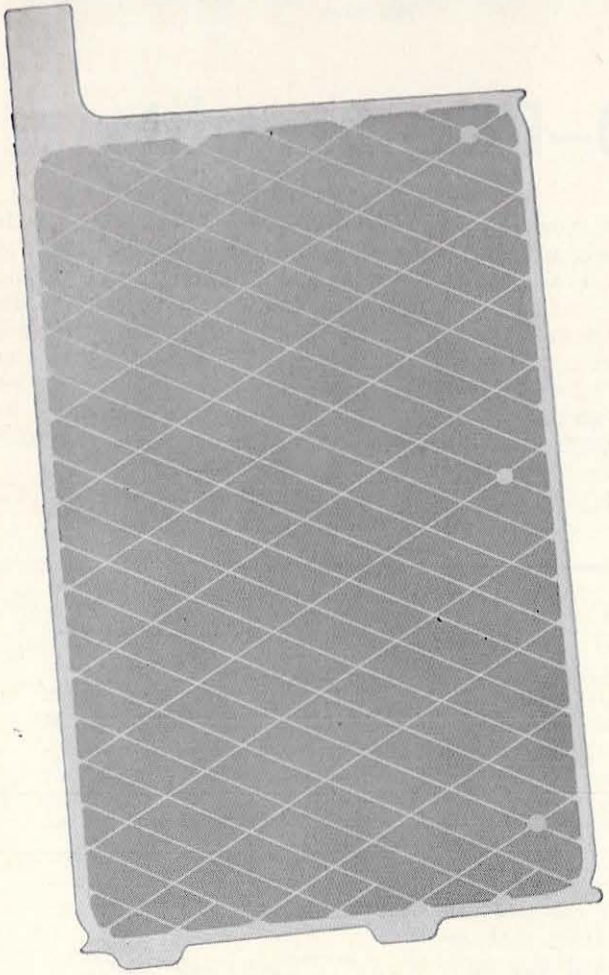

A vital contribution to motive power batteries, Gould's NEW Silconic Plate prevents grid corrosion, the most common cause of battery failure.

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RULES PROPOSALS AROUSE UNIONS *(Continued from page 10)*

of notices. With union programs not yet definite, local meetings probably won't come until late this month. At least two factors—the time needed to set the dispute for regional-national handling and the nearness of the Christmas holidays—point to an early-January start for conference committee negotiations.

SUNA's demands, first to be served by an operating craft, will involve vacations, holidays, life insurance and sick leave and certain compensatory rules. None of the other unions' proposals are in final form, although BLE chairmen were instructed more than two months ago to study possible demands for changes in compensatory rules, use of an apprentice engineer, the six-hour day, sick leave (RA, Aug. 31, p. 9)

[One of the non-operating groups, the American Train Dispatchers' Association, has approved a report recommending that ATDA officers start a movement, through national legislation, for a six-hour basic day at no reduction in pay. A union committee report was quoted as saying that dispatcher life expectancy is about 15 years short of the 67-year industry average and "relief from the strain and shock of the last two hours of work each day will have a salutary effect on longevity."]

Most of the attention last week was focused on the impact of the carrier notices—even though the general content of the demands had been strongly indicated for weeks before.

BLE Chief Brown had a comment on each of the six basic points covered by the carriers' demands—and on three of the five points affecting engineers, he indicated some willingness to talk about changes. On two points—elimination of barriers between road and yard service and elimination of the fireman—he stood firm against the revision of the rules.

He saw a chance to work out some agreement on the basic-day demand—provided there's no loss of pay to the engineers. He opposed the industry's companion proposal to eliminate mileage regulations. Elimination of terminals and lengthening of runs, Mr. Brown commented, are matters "that need discussing if the railroads are to compete with other forms of transportation." He recognized that terminal location is a holdover from the steam era—but, he added, "the carriers will have to recognize their responsibilities to their present employees" in any changes that might be made. As for rules requiring standby operating personnel on self-propelled maintenance-repair-inspection equipment, he conceded that some revision "is probably in order . . . but many rules serve a useful safety purpose and could be justified on that basis. We don't want employees not familiar with train orders and operating rules out there on the main track."

BLF&E President Gilbert's response to the rules demands was less mild. The proposals, he charged, are "proof that the railroad industry intends to maintain its record profit levels by shoving thousands of employees into unemployment lines. Every proposal advanced by the railroads has one purpose—less employees and more work from the remaining force at less pay. The proposals rank as an inhuman affront to rail workers and their families and are totally unrealistic in the practical aspects of railroading."

If the railroads won all they're seeking, he declared, "entire rail communities would cease to exist. Rail employment—now at its lowest level—would sink even lower. Railroad workers would have to submit to corporate slavery and safe operation would be virtually non-existent."

Neil N. Speirs, president of SUNA, said carrier demands appear to be "designed to break down craft lines and create a reservoir of manpower which the carriers could use in any capacity they desire."

'Propaganda Mills' Hit

In an address prepared for delivery at the Chicago rally, BRC President Harrison bitterly attacked management for what he called its campaign "to discredit railroad workers in the eyes of the world."

"The propaganda mills in the advertising agencies hired by the carriers in this fantastic multi-million-dollar campaign of false charges of featherbedding among railroad employees have been going around the clock," he said. "You've all seen those advertisements, containing vicious and untrue assertions that the working practices of railroad workers will cost the public each year as much as the Chicago fire, the San Francisco earthquake, and other such disasters. Only a New York City Madison Avenue copy writer who was half awake could have dreamed up such nonsense. . ."

He said the Railway Labor Act has worked "remarkably well" in maintaining peace in the industry, but "this record is now being threatened . . . by a propaganda campaign of railroad management, which has the effrontery to publicly declare that it intends—and unilaterally—to change the work rules which were established to protect the public as well as the railroad workers—even if it has to lock out its workers by forcing them to strike."

Mr. Harrison said the railroads appear to have "unlimited funds to attack their workers" in advertisements—but they've "been spending practically nothing in relative terms to insure the prosperity of their industry."

He said the "employees the railroads are attacking" are "the most productive group of workers of any American industry."

"We are in a growing, expanding economy and there will be tremendous growth in the need for railroad services—of all categories—in the years ahead," said Mr. Harrison. "If the railroads will stop wrecking their own plant by deliberate destruction of passenger service, even on profitable runs—if they will stop the delay of freight and other services to the public by failure to supply railroad operations needed, the brightest and most profitable period still lies ahead. But to attain that goal they must continue to have the support and cooperation of their employees."

Wage Showdown Reported Near

The most ominous labor-management note last week concerned not the rules dispute but the stalled negotiations on wages. Unless mediation proceedings show progress in a hurry, a top brotherhood officer warned, labor may press for immediate appointment of an emergency board. The brotherhoods could force the issue by attempting to break off mediation or by spreading a strike ballot.

Mediators stepped into the wage disputes involving the Engineers, Conductors and Switchmen during the week of Oct. 26. Meetings since that time, this labor spokesman declared, have brought carriers and organizations no closer to an agreement.

He indicated that mediation might be terminated in about another week, unless some offer is forthcoming.

Other union spokesmen didn't view the situation as critical at present—and there were indications that informal propositions are being explored. (One, it's reported, would involve continuation of the cost-of-living clause and provision for a deferred wage increase.) One brotherhood officer said he expects mediation efforts to be intensified this week.

How to Reduce Crosstie Costs

► **The Story at a Glance: Several proposals aimed at lower costs for crossties were put forward at a meeting of tie producers and railroad users. They include suggested specifications for a standard treated tie and a plea for railroads to accept hardwood ties other than oak. The group was also told how railroad crosstie buying practices result in higher prices for ties.**

Railroads can effect substantial reductions in crosstie costs—but to do so they will have to make important revisions in some of the practices they have been following for many years.

This statement summarizes opinions expressed in addresses presented at the annual convention of the Railway Tie Association in Cincinnati, Ohio, Oct. 28-30.

The appeals for changes in crosstie practices came primarily from producers and treaters of wood ties, but not entirely. A railroad man told the group —composed of both tie producers and railroad officers responsible for the procurement and use of ties—how the railroads' crosstie buying practices produced "very expensive results" in 1956 and again in 1959.

Standardization of crossties was one of the areas in which savings were visualized. But there are obstacles confronting such a step, according to F. J. Fudge, timber engineer of the New York Central, and chairman of the Committee on Ties of the AREA. "Some railroads do not require their ties to be adzed and bored while others do," he explained. Moreover, he said, "those railroads requiring adzing and boring have many different sizes of tie plates and these plates have many different locations of holes for spikes. The railroads would first have to standardize the spacing of spike holes and size of tie plates." His conclusion: "Standardization of adzing and boring is a long way off."

Plan for Standardization

A suggestion for overcoming this problem, including a definite proposal for a standardized boring pattern, was offered by E. R. Snodgrass, manager operating and engineering department, Wood Preserving Division, Koppers Company, Inc. His proposal was made on the premise that "probably the principal benefit from adzing and boring crossties before treatment comes from the assured penetration of preservative in the wood around the spike."

Since selection of one spike-driving pattern as a standard is not practical, said Mr. Snodgrass, "we can do as some railroads have already done. We can compromise and bore a pattern, not for spikes but for assurance of preservative penetration in the rail-base area of the tie." His recommendation is that eight ½-in. holes be drilled, four at each rail base, in a staggered pattern that will fall well under the rail. The theory is that "end grain penetration of the preservative from these holes will spread into the area where spikes are driven."

"Driving spikes away from the drilled holes has been practiced inadvertently for so many years that I expect we might even find service records to show that the practice is acceptable," said Mr. Snodgrass. In addition to the proposal for a standard boring pattern, he recommends a "light adz cut over an 18-in.-wide portion of the face of each tie at the rail base."

A long step toward a standard preservative specification for crossties was also proposed by Mr. Snodgrass. As the situation stands now, he explained, there are in common use some 10 preservative solutions or mixtures and each is used in four or five retentions, resulting in "forty or fifty preservative specifications in common use." Reasoning that a "compromise on one preservative may be too great a step to take all at once," Mr. Snodgrass offered two preservative specifications for consideration as a possible standard. These are a 70/30 creosote-coal tar solution to be used in not less than 7 lb per cu ft retention; and a 50/50 creosote-petroleum mixture to be used in not less than 8 lb per cu ft retention.

On the matter of the advantages to be derived from a standard treated tie, Mr. Snodgrass pointed first to considerable savings in investment dollars and operating expense that, he said, would be realized at the treating plant. But these savings, he added, are "incidental to the big benefit of having a standard treated tie." A tie "acceptable for use at any point on any railroad, even if it were acceptable only as a second choice, would encourage tie producers to maintain inventories from which the railroads could meet their widely fluctuating crosstie needs. It would give the tie maker a steady market for his crossties. The cost to the tie makers, the tie treaters, and the railroads will surely be less than the costs under our present-day efforts to schedule tie making and tie treating in step with 'feast or famine' track maintenance."

The mechanism that causes tie buying on a "feast or famine" basis to be costly to the railroads was explained in an example cited by another speaker, R. B. Smith, buyer forest products and manager treating plants of the Rock Island. As he described it:

"In early 1958 when business was in a severe slump there existed a distinct buyer's market in railroad crossties and they were less costly than at any time since 1955, despite the labor and stumpage cost increases during that period. It was an ideal time to continue a high level of tie buying, with substantial savings to be realized over the carrying charges.

"Unfortunately, for financial reasons, we like all other railroads discontinued our tie purchases from March to September 1958 and have since had considerable difficulty in getting our producers to meet their quotas. In fact we found it necessary, effective Aug. 1, 1959, to increase tie prices approximately 10% to stimulate production and to meet the prices being paid by other railroads in the same tie-producing territory.

"In other words, while remaining out of the buyers' market in 1955 and 1958 while other railroads were doing the same, our tie inventories were decreasing to the point where, in mid-1956 and again in mid-1959, most midwestern railroads, including the Rock Island, found it urgently necessary to increase their purchasing. This created a concentrated, false 'pent-up' demand resulting in some of the roads' buyers competing against each other to the detriment of all with respect to supply as well as price and with very expensive results."

On the Scarcity of Oak

Another crosstie buying practice of some roads—that of demanding nothing but oak ties—came under critical scrutiny at the meeting. Waldo E. Tiller, president of the Tiller Tie & Lumber Co., offered a word of warning on this score. "There isn't any doubt," he said, "but what the roads demanding nothing but oak ties will have to pay a premium in price, and frankly, I doubt in an active market they can procure all their requirements in nothing but oak."

"There is a heavy drain throughout the country on oak timber," said Mr. Tiller. "The stands are rapidly being

(*Continued on page 27*)

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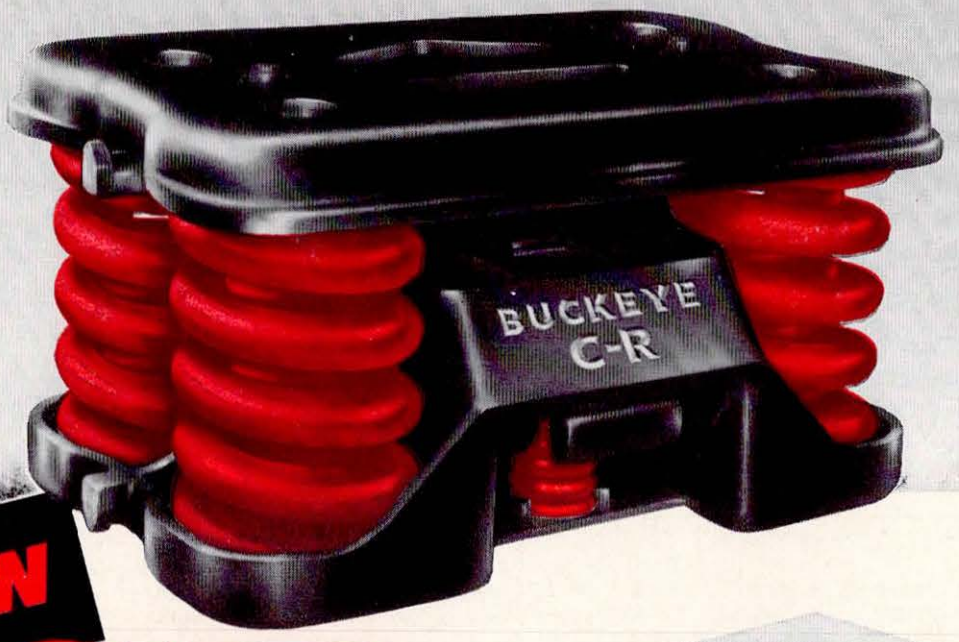

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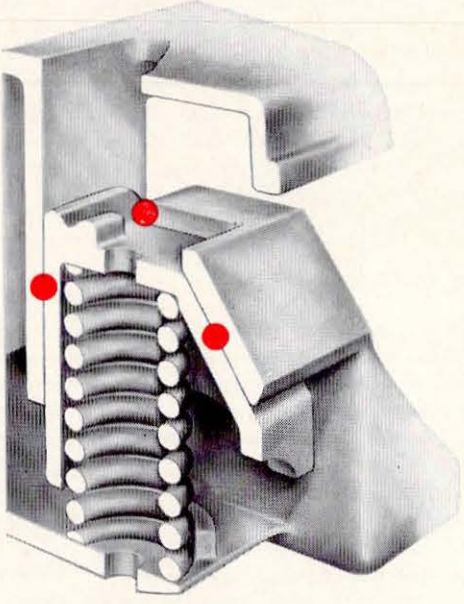

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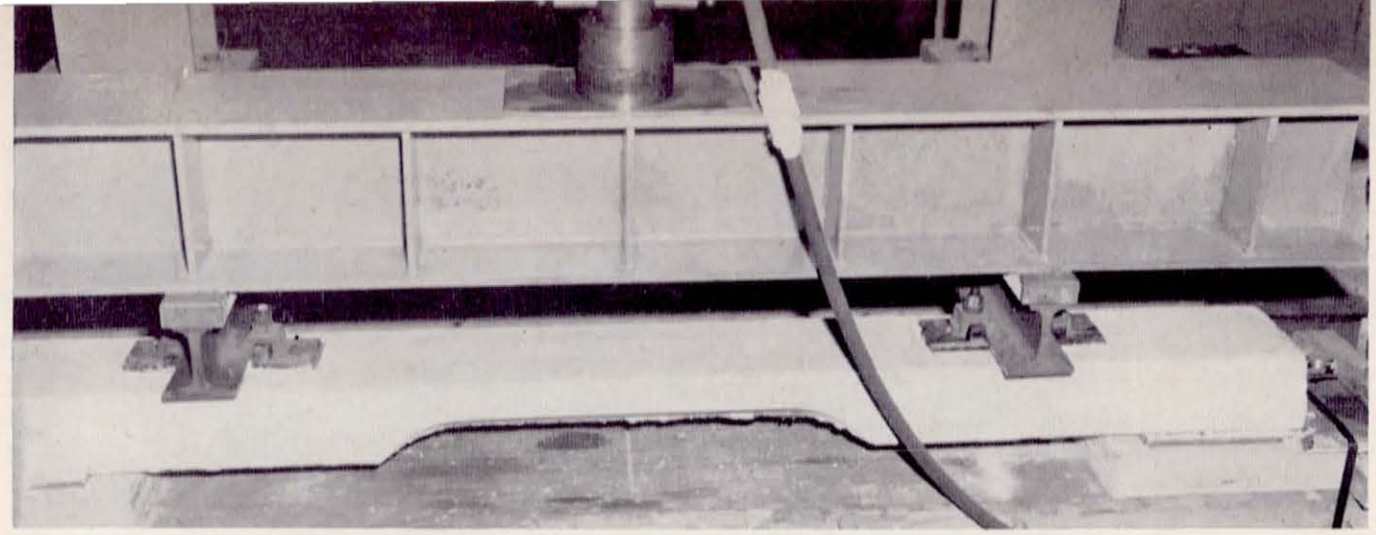


CONCRETE TIE in testing machine at AAR Research Center. Researchers report that Tie E withstood two million cycles of a bending moment equal to 150,000 in.-lb. Manufacturer expects the tie to have a 75-year life.

RRs Plan Concrete-Tie Tests

The concrete crosstie is again being seriously considered for use on American railroads.

This renewed interest is evident in several quarters. The most tangible evidence of it is the plans of the Seaboard Air Line and the Atlantic Coast Line to install quarter-mile test sections of concrete ties in the near future. Other roads, including the Baltimore & Ohio, the Denver & Rio Grande Western and the Western Pacific, have indicated interest in similar tests.

Based on Three Factors

Behind the revival of interest in the concrete tie are three principle factors:

- Extensive use of concrete ties in Europe, especially Germany.
- The special properties of prestressed concrete.
- Advantages of use with continuous welded rail.

Increased use of the concrete tie in Europe has been sparked primarily by a shortage of timber. Dr. Gerhard Schramm, track advisor for the German Federal Railroad, in comparing the relative costs of wood and concrete ties in Western Germany, says "the concrete tie is superior in economic respects in the long run, if it has a longevity of more than 35 or 46 years, depending on the cost of wood ties." And, he adds, it "appears certain that the concrete ties will have a longer life." There are, according to Dr. Schramm, about 12 million concrete ties in the tracks of the German Federal Railroad (RA, June 22, p. 43).

The wood tie is relatively less costly here than in Western Germany. But experience with concrete ties in Germany, and elsewhere in Europe, has, if nothing else, demonstrated their practicability in service, according to observers in this country.

Prestressed concrete, use of which has grown rapidly in this country in recent years, has been an important factor in reviving interest in the concrete tie. Ordinary reinforced concrete has limited ability to withstand tensile stress without cracking. Since the underside of a tie directly under the rail is subject to considerable tension, crossties of conventional reinforced concrete are apt to develop cracks in this area.

On the other hand, when ties are made of prestressed concrete the pretensioned cables embedded in them have the effect of keeping the concrete in compression, or at least of preventing the tensile stress from exceeding a predetermined amount. If this level is exceeded due to excessive load, and cracks do develop, they close up as soon as the load has been removed. For this reason, explains G. M. Magee, AAR director of engineering research, prestressed concrete ties can be expected to have a much longer service life than those of ordinary reinforced concrete.

Where the rail in track is welded into continuous lengths it is a recognized fact that very large stresses are built up in the rails because of temperature changes. For this reason, the stabilizing effect afforded by the greater weight of concrete ties when used with continuous rail is thought to have considerable value. That this factor has a bearing on the present interest in concrete crossties is indicated by the fact that the experimental installations on both the Seaboard and ACL will be made with continuous welded rail.

Private enterprise must also be counted as a factor in furthering the cause of the concrete tie. Several manufacturers of prestressed concrete products around the country, looking for new markets, have been impressed by the volume possibilities inherent in the railroad field if the concrete tie were to win even limited acceptance. Notable among these is the American Concrete Crosstie Corporation, Tampa, Fla.

This firm requested, and obtained, the cooperation of the research staff of the AAR's Engineering Division in developing a design for a prestressed tie. Following extensive tests in the AAR Research Center at Chicago, Mr. Magee and his associates have now settled on a design known as "Tie E."

Cost was a primary consideration in the development of this design. One way to minimize cost would be to increase the tie spacing in track to 30 in. from the 20 in. now generally used for wood ties, thereby reducing the number of ties required from about 3,200 per mile to about 2,100. Studies and tests have shown that the resulting increase in flexural stress in the rail, amounting only to about 10%, would be well within the capacity of the heavier rail.

Tie Is Wider at Bottom

To obtain the bearing area in the ballast required with the greater spacing, Tie E was made 12 in. wide at the bottom at the ends. It tapers to a width of 9 in. at the top. To add to the stability of the tie in the ballast, the bottom is concave at the ends. For a length of about 3 ft at the middle, the tie is wedge-shaped on the bottom as a means of preventing a centerbound condition.

Because of the greater compressive strength of concrete compared with wood, a tie plate only 5 in. wide will be used with Tie E. It will be separated from the tie by an insulating pad, probably of creosoted plywood. At each tie plate, the rail will be fastened on each side by a special clip held down by a bolt extending through a hole cast in the concrete. Insulation is provided by a flanged rubber sleeve around each bolt. In addition to serving as a rail fastening, the clips are designed to exert enough pressure to prevent creepage of the rail.

How much will the concrete tie cost? In a brochure published by the American Concrete Crosstie Corporation and entitled "Concrete Railway Ties," the "maximum cost in foreseeable future" is given as $9 per tie. Presumably, this figure is an estimate based on the cost of manufacture using a special machine perfected by the company, which is said to be able to produce 1,000 ties per day.

Comparative estimates are given in the brochure of the cost of a mile of track laid with wood ties and of a mile laid with concrete ties. According to the estimates, which exclude rails and labor, the cost is about $3,000 more per mile for track laid with concrete ties.

Proponents of the concrete tie are banking on longer service life and lower maintenance costs to place concrete ties in a favorable cost position compared with wood ties. The service life that might be obtained from the prestressed concrete tie is "questionable at this time," says Mr. Magee. But he adds that "it might not be too optimistic to expect a 50-year life." He predicates this estimate on the use of a strong, dense concrete with air entrainment and on the assumption "that the tie does not become unserviceable in the meantime due to damage from derailments."

On the matter of what happens when a derailment occurs, the brochure on concrete ties recounts an experience in Spain when a train was derailed at a speed of 30 mph because of a broken axle under the tender. "The wheels," it says, "ran over an 800-ft section of concrete crossties and not one had to be replaced."

The cost of maintaining track laid with concrete ties will be determined through experience with the experimental sections. Now, such costs are a matter of conjecture only, except for observations made during the laboratory tests. These indicate, according to members of the research staff, that there may be some advantage in favor of the concrete tie.

Other questions remain to be answered. These stem mainly from the greater weight of the concrete tie and its other special physical characteristics, and are concerned with the problems of distribution, handling and insertion. More information on these aspects of the subject will become available when the quarter-mile experimental installations are made on the SAL and ACL.

Railroading After Hours with Jim Lyne

BATTLE OF THE GAGES—No surprise to me that I've got some mighty interesting mail on my remarks about narrow gage. A couple of friends set the record straight on the fact that most U. S. narrow gage was 3 ft rather than 3½ ft. Also, there are those who insist that 2-ft gage and being a "real railroad" are not incompatible. C. W. Hauck, president of the Iron Horse Development Corp. of Cincinnati, names a half-dozen "real railroads" in Maine alone—all 2-ft gage.

The only narrow-gage line in regular commercial operation today (apart from the purely tourist attractions), he says, is the Rio Grande's Durango-Silverton line. (There is, also, the 3½-ft-gage Newfoundland line of the CNR).

William Vigrass of Cleveland, also, writes me about Maine's (and other) two-footers. He says almost 1,000 miles of 2-ft gage in South Africa were recently widened to 3½ ft (which is "standard" in that country). And these 2-ft lines have been powered by substantial Garratt locomotives, which pull upwards of 400 tons.

Chief Mechanical Engineer John Ingles of the DT&I passes along similar information, also recommending a book "Little Railways of the World," which covers them all—gages down to less than 1 ft!

EFFICIENT MAGAZINE USE—I'd like to get advice on magazine reading—seeing as how I am both a producer and a consumer of such products. As a consumer, I divide magazines into two categories—those I skim through and never want to see again, and those I either want to file for a while, or to clip something from, for filing. I'm perfectly willing to share the skim-through periodicals with my associates. But, obviously, that won't work for those I want to file or clip.

I hope Railway Age is this latter kind of magazine for most of its readers—but, sometimes, I wonder. Especially when I see the extent to which some copies are made to serve a half-dozen readers or even more. Not many people would want to share a 5¢ pencil with several associates. So why have to share a copy of a magazine priced at hardly any more than a pencil? And less than the morning newspaper?

There's such a torrent of reading matter these days, that it takes skill to winnow the wheat from the chaff. It would help if people who've developed techniques for doing this job efficiently would pass the word along.

DOES RATE FREEDOM WORK?—A friend of mine wants to know why it is that the British railways—which enjoy practically complete freedom in rate-making—appear still to be losing freight traffic to the highway. I believe there are two answers to that question. One is that, with the short hauls and short trains prevailing in Britain, the cost advantage of rail over highway transportation is much narrower in Britain than it is, on the average, on this side of the Atlantic.

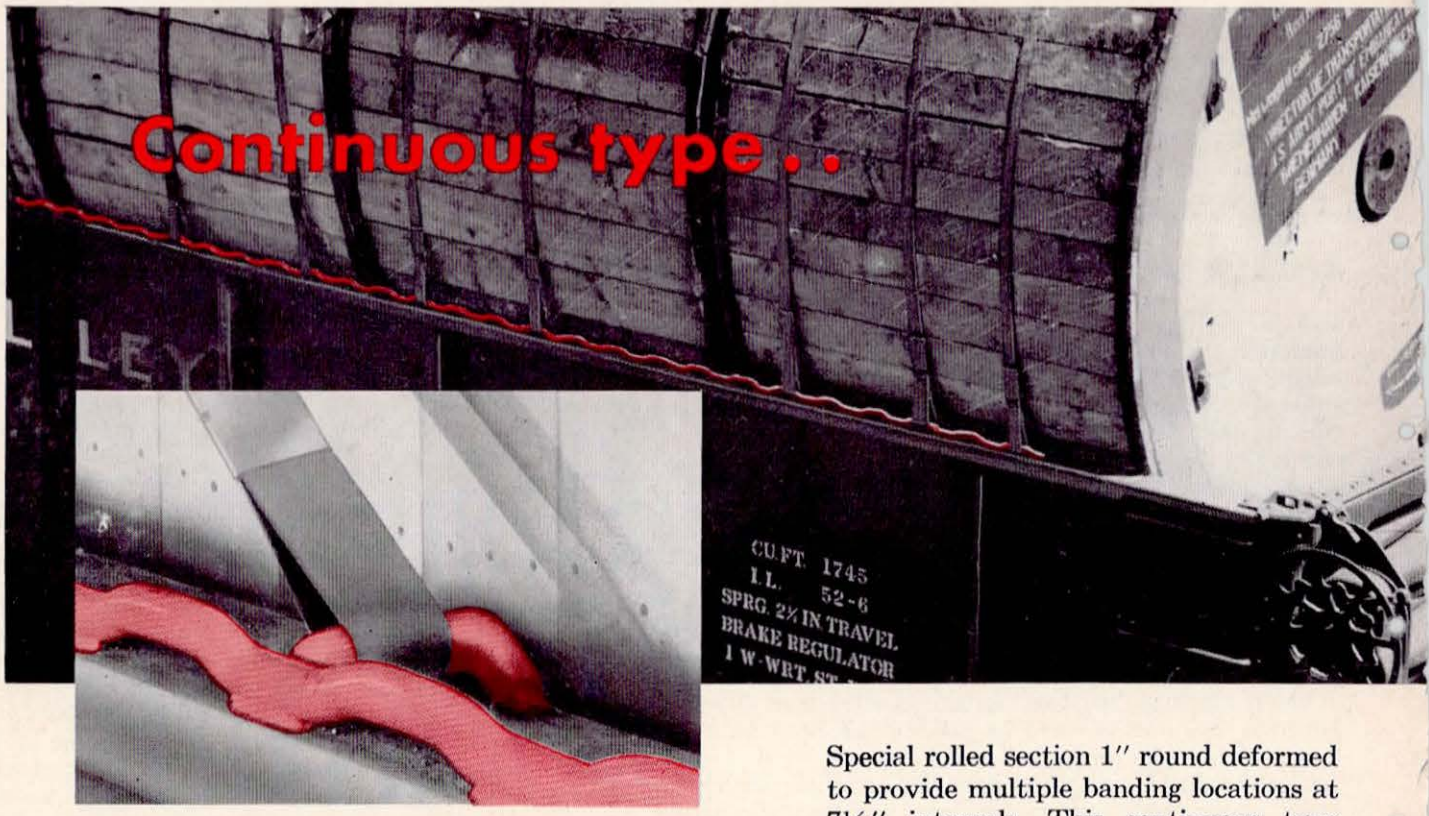
The other answer (and probably the more important) is that the British railways have enjoyed rate-making freedom for only a couple years—and, naturally, they haven't had time, yet, to explore all its possibilities. When you change freight rates, you have to proceed with caution—and after exhaustive study of the pertinent facts—or your new rates may not be any more effective than the old ones.

You give a hammer-and-saw carpenter a power saw. Eventually, he'll learn to do miracles with it. But if he tries fancy tricks at the very outset, he may wind up with a few fingers missing.

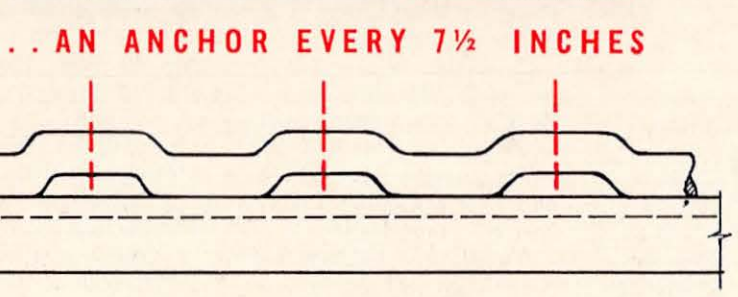
LADING BAND ANCHORS

Designed for Maximum Utility

Designed especially for both gondola and flat car application. Welded to position, both types afford easy band access and fully rounded contact surfaces.

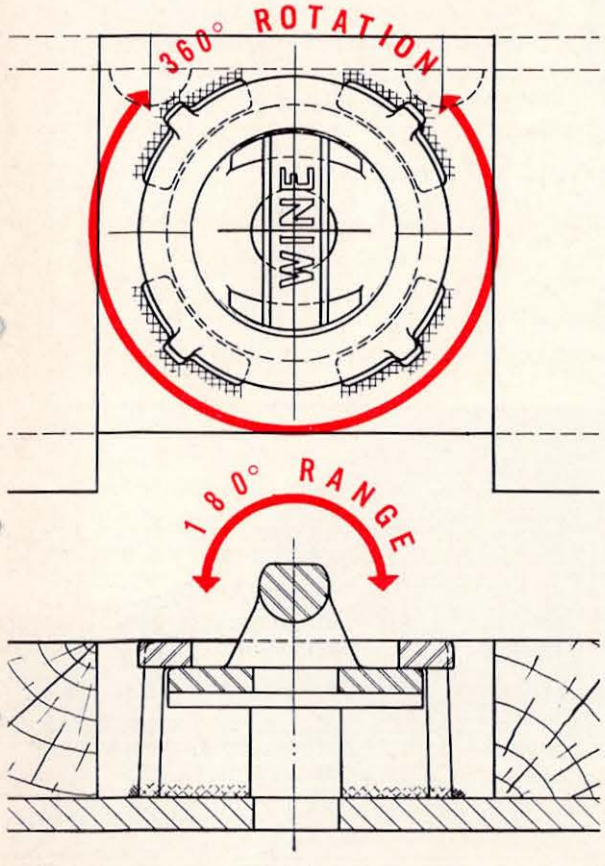


Special rolled section 1" round deformed to provide multiple banding locations at 7½" intervals. This continuous type anchor is best adapted to the top coping of gondola cars. Composite lengths available for various car design requirements. Individual cast steel anchors for end strapping complete the application.



Universal type . .

Electric cast steel with an unlimited range of adjustment in two planes the universal type anchor is best suited for flat car floors and drops flush when not in use. Multiple application of the universal type affords anchorage from any angle.



38 RAILROADS DISCOVER
how to maintain a freight car's bearing

Want to cut your direct labor and material costs for freight car bearing maintenance *as much as 98%?*

Sounds impossible, doesn't it? But it can be done—and 38 railroads have the proof.

They've been using KAR-GO Bearings on 805 freight cars for the past year, and after an average 20,000 miles of grueling duty, here's what Allison has learned:

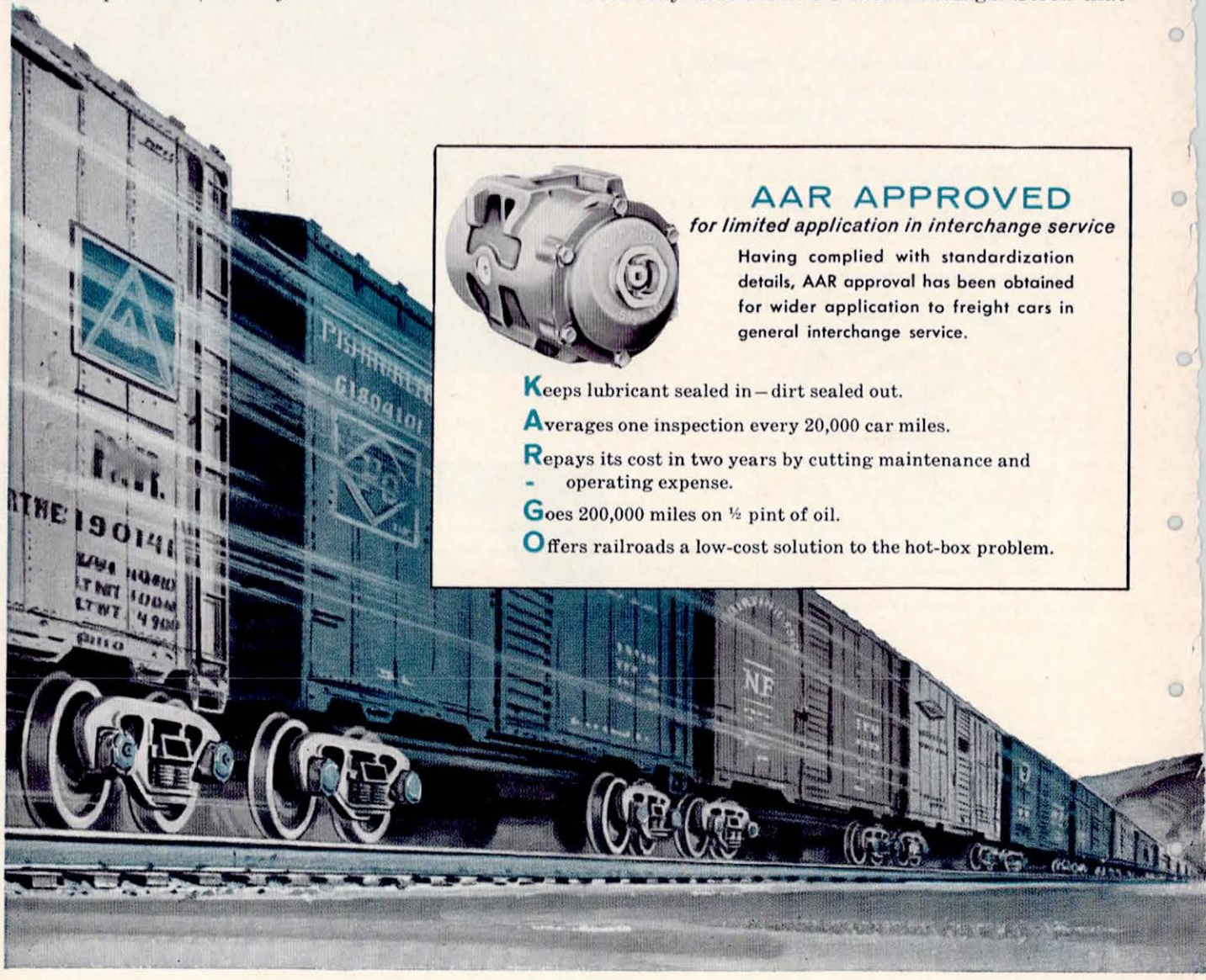
Average KAR-GO Bearing direct labor and material costs per car—$1.16 a year!

That's a full $94.84 *less* than the average cost of maintaining a standard journal bearing on a car traveling 20,000 miles.

And that's not the whole KAR-GO savings story—by any means.

Take, for instance, savings in bearing replacement. When the KAR-GO equipped cars had chalked up 20,000,000 miles, only 4 bearings needed replacement. Compare this with what your road experiences with waste- or pad-lubricated bearings.

Not only does KAR-GO mean savings. Stock that



AAR APPROVED

for limited application in interchange service

Having complied with standardization details, AAR approval has been obtained for wider application to freight cars in general interchange service.

Keeps lubricant sealed in—dirt sealed out.

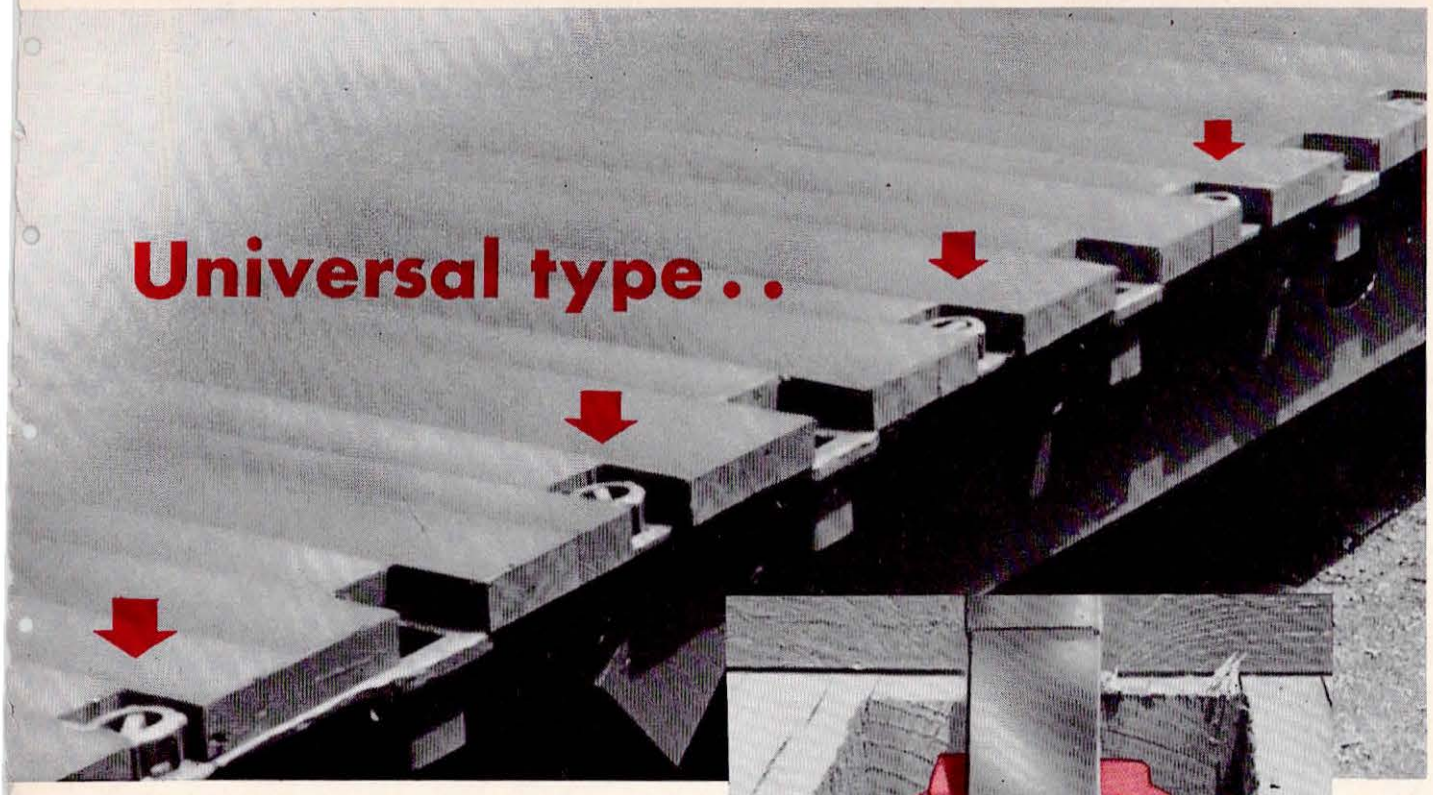
Averages one inspection every 20,000 car miles.

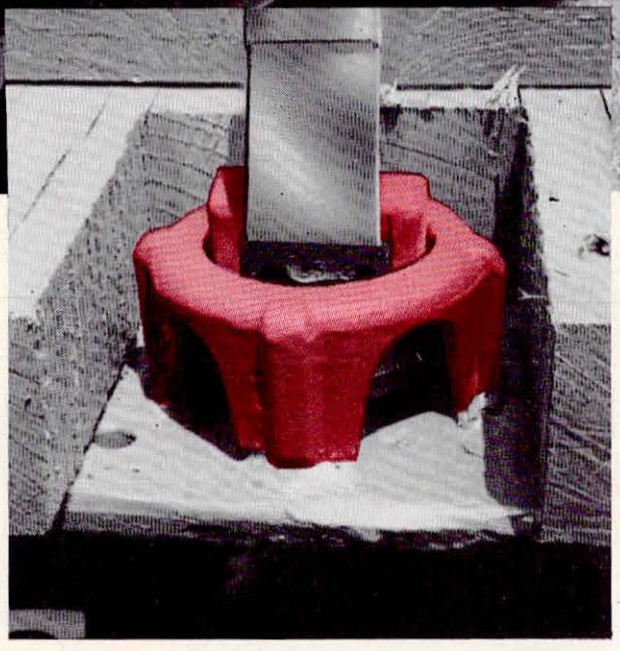
Repays its cost in two years by cutting maintenance and operating expense.

Goes 200,000 miles on ½ pint of oil.

Offers railroads a low-cost solution to the hot-box problem.

Universal type . .





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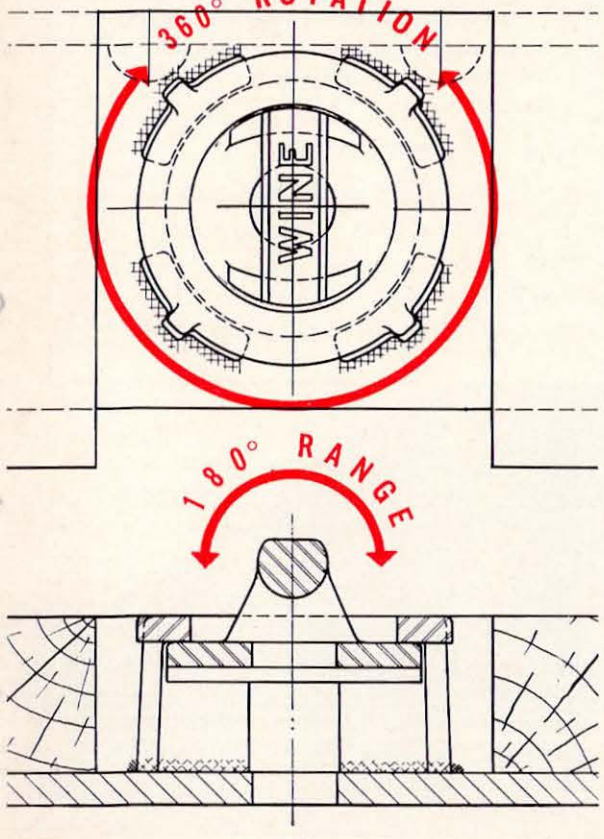

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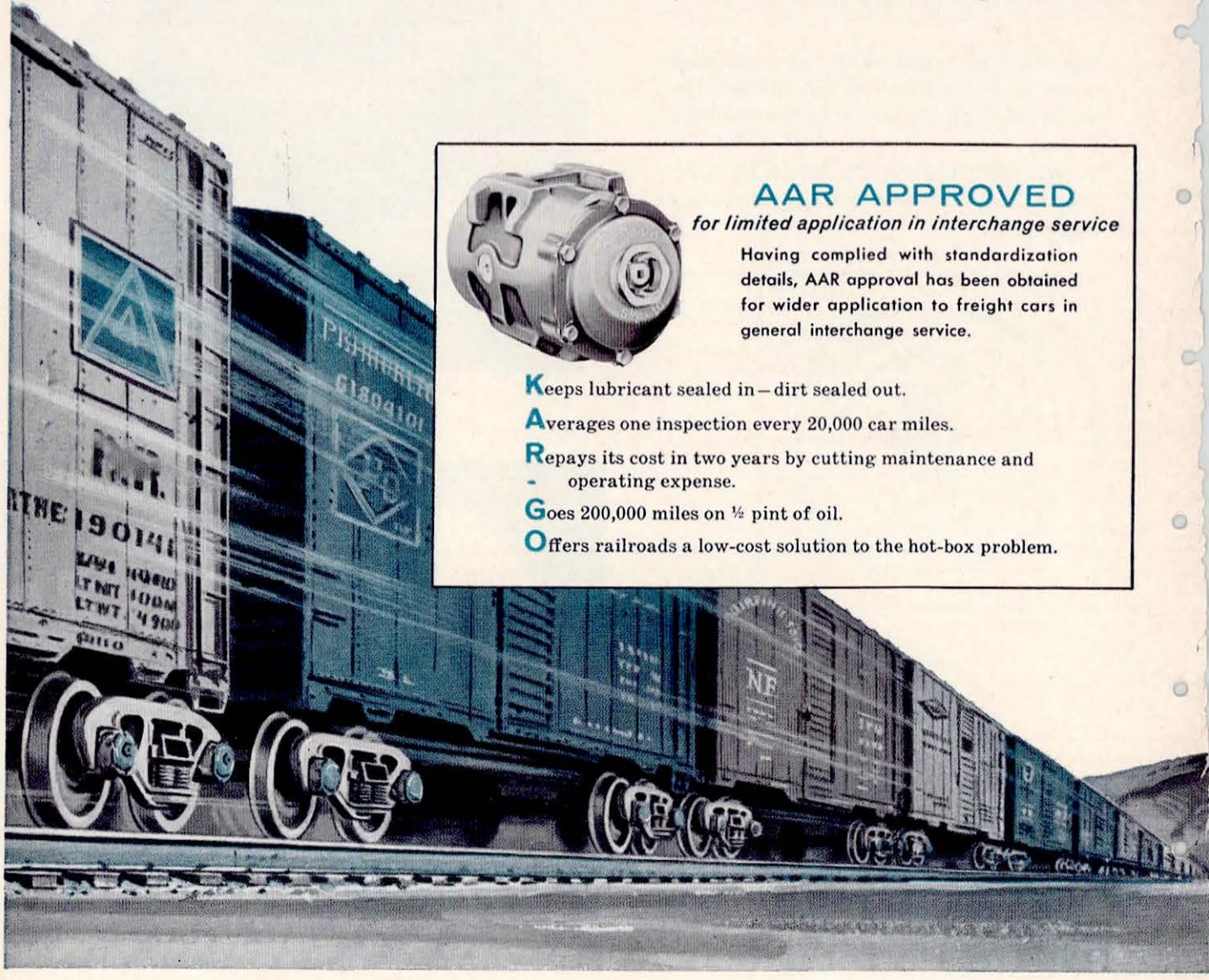

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Goes 200,000 miles on ½ pint of oil.

Offers railroads a low-cost solution to the hot-box problem.

for $1.16 a year

rolls on KAR-GO Bearings spends more time running, less time standing still for repairs. That adds up to greater revenue per car.

If you're from Missouri – and want to see the KAR-GO savings and earnings story for yourself and for your railroad, install KAR-GO Bearings in your next freight car conversion or new car build. You'll want to go the moneysaving KAR-GO way—all the way.

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS
Indianapolis 6, Indiana

Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison connecting rod and crankshaft main bearings and piston-pin bushings.

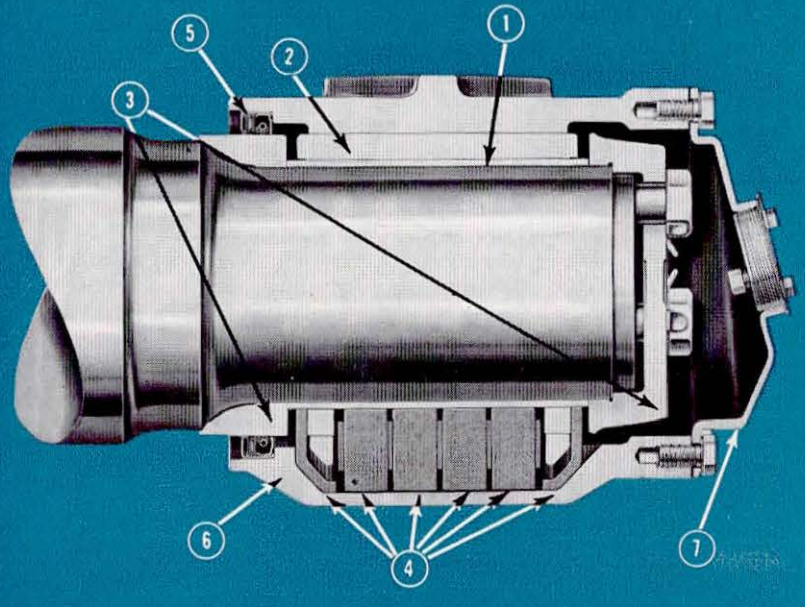
Allison

KAR-GO

JOURNAL BEARINGS

A product of and built only by the Allison Division of General Motors

THE INSIDE STORY



Built to run for hundreds of thousands of miles, the Allison KAR-GO Cartridge Bearing gives you a *sure* answer to the hot-box problem at a low, low cost.

1. JOURNAL SLEEVE
Smooth, hardened surface for maximum bearing life—eliminates axle wear.

2. ALUMINUM ALLOY BEARING
Economical, precision-fitted, full round for maximum heat dissipation and prevention of axle roll-out.

3. THRUST RING AND CAP
Absorb lateral thrust on hardened faces. Ring provides highly finished surface for oil seal.

4. FELT WICK LUBRICATOR
Insures adequate oil delivery to bearing—spring-loaded to make constant contact with journal sleeve.

5. OIL SEAL
Double lip, automotive type; keeps oil in and dirt and water out.

6. HOUSING
Rugged pearlitic malleable iron; completely encloses entire assembly; eliminates need for separate adapter.

7. COVER ASSEMBLY
Provides sealed closure, oil-filler plug and pressure-relief valve.

P&WV Likes Composition Shoes

Operating and mechanical departments must cooperate closely during installation of composition brake shoes on locomotives previously equipped with metal shoes.

That's what W. C. Kresge, general superintendent of the Pittsburgh & West Virginia, told Railway Age recently while discussing the program which equipped all his road's diesel locomotives with Cobra composition brake shoes.

Instruction Is Imperative

It is essential, he stresses, for road foremen to know exactly what composition shoes will and will not do. Enginemen also must be properly instructed in the operating characteristics of the composition shoes.

The P&WV began its Cobra-shoe program because it had no equipment for turning wheels in place under locomotives. Last year's revision of the Other-Than Steam Locomotive Inspection Rules made correction of flat spots more difficult for the hilly short line.

The first installation of Cobra composition brake shoes on a P&WV locomotive was made in June 1958. Now all the road's 26 Fairbanks-Morse 1,600-hp and 2,000-hp road switchers are so equipped.

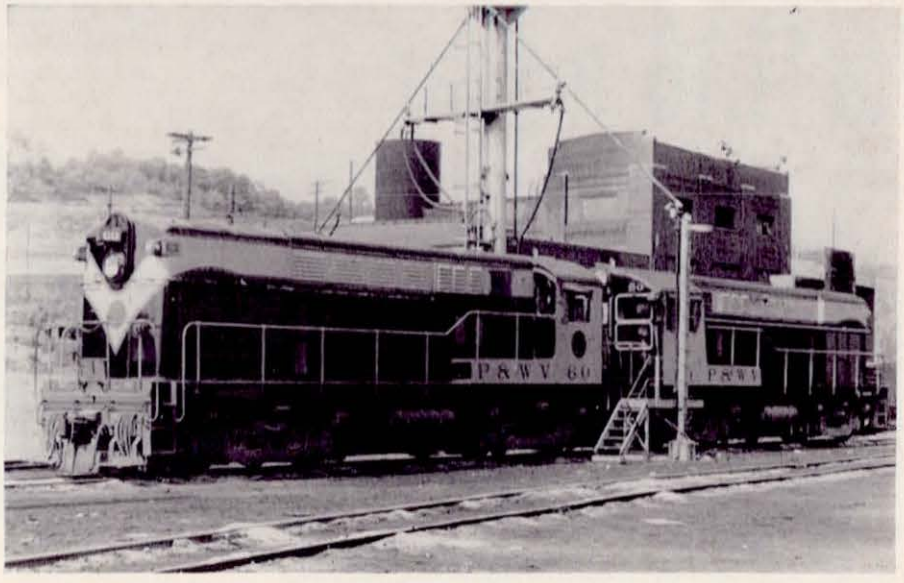
After several months of all-Cobra operation, the road says:

- Cobra composition brake shoes last four times longer than metal shoes;
- Thermal cracking of wheels has been eliminated;
- Wheels retain longer their proper tread and flange contour; and
- Slid flats and built-up treads no longer occur.

No Dynamic Braking

None of the 26 locomotives has dynamic braking, and the nature of P&WV operations resulted in many flat wheels. Faced with the rules revision, the road decided to attempt to minimize flat spots rather than try to justify the investment in new equipment for removing them. The P&WV is one of the first U. S. roads to convert existing road service locomotives from metal to composition brake shoes.

The mechanical department found conversion an easy job which could be completed on a diesel unit in about four hours. It used a Westinghouse Air Brake conversion kit which included bushings for the eight locomotive brake cylinders, grommets for sealing the bushings against the cylinder heads, new smaller pistons, the 16 flange-type Cobra shoes, and a new pressure spring for the locomotive's independent brake valve.



LOCOMOTIVES of the Pittsburgh & West Virginia have been among the first road units to be converted to composition shoes.

Braking forces must be reduced with Cobra shoes because of their higher coefficient of friction. This is achieved on the P&WV units by bushing the cylinders and installing pistons of smaller area. Smaller cylinders are used initially when new locomotives are being equipped with composition shoes.

On the P&WV, cylinder pressure was increased to produce a greater differential between the applied and released positions. This insures that shoes will move clear of the wheels when released.

Independent brake pressure on all P&WV locomotives is now set at 60 psi—25 psi higher than when the units had metal shoes. During the installation period, for the most part only Cobra-shoe diesel units were operated together in multiple-unit locomotives. If it was necessary to mix the two types of units, the metal-shoe unit was placed at the front. This guaranteed that the 60 psi independent air setting on the composition-shoe units could not lock the wheels on the metal-shoe units.

The constant frictional characteristics of composition shoes necessitated the educational program for enginemen. The increasing coefficient of friction for iron shoes as speed decreases means that the locked wheel stop is almost traditional. After an epidemic of slid flat spots on the composition-shoe units, investigation showed that enginemen had been stepping up the independent brake pressure to produce locked-wheel stops with the composition shoe units.

Because of the uniform coefficient of friction, this could result in locked wheels at speeds which could produce serious flat spots. The 60 psi independent setting will give about the maximum possible braking effort, and only small increases will slide the wheels. It was finally necessary to seal the independent valve pressure adjustment and make enginemen responsible for broken seals.

More Use of Automatic Brake

During the investigation, it was found that enginemen place undue reliance on the independent brake. Road foremen are now stressing greater use of the automatic brake on the P&WV's frequent and heavy grades. This makes possible cooler wheels and produces smoother train operation.

Several of the storage tracks on the road are on grades. It was found that in recharging cars which had been stored, it was necessary to keep hand brakes applied until the train line was charged and an automatic brake application made. This was discovered after units with Cobra shoes were moved by cuts of cars they were trying to hold with independent applications alone.

After solving these operating problems, it was found that wheel and shoe life could be extended appreciably.

CROSSTIE COSTS

(*Continued from page 18*)

diminished and the competition between various wood products for what oak stumpage is available is fast increasing the price, and is, at the same time, diminishing the supply."

Mr. Tiller is also convinced that "present specifications should be changed to permit more tolerance on wane." He described as "inconsistent" the practice of allowing "certain amounts of wane on some items such as car material and plank" and not allowing a like amount on crossties.

In Mr. Tiller's opinion, "the most important thing for you railroad engineers and purchasing agents to realize at this time is that your crossties are being made by and large by saw mills that have the same opportunity to cut the same timber into wood products other than ties. If you do not meet the situation with comparative specifications and prices of other wood products, you are going to find that the sawmills will more and more stop cutting crossties and cut other items such as decking, plank, car material, flooring stock, and construction lumber."

Measures being taken by railroads to reduce tie costs through longer service life were described in an address by Frank R. Woolford, chief engineer of the Western Pacific. On his road these measures include larger tie plates, tie pads and dowelling. In Mr. Woolford's opinion, "a 40-, or possibly a 50-, year life should not be unreasonable to expect from an average wood tie properly seasoned, effectively treated and protected before being placed in track."

Extensive experiments with pentachlorophenol-petroleum solution as a preservative for crossties were described by E. A. Bromley, the CNR's vice president-purchases and stores. These were started in 1954 with 5% penta in petroleum. Later the amount of penta was reduced to 3%. According to Mr. Bromley, tests have "confirmed" that 3% solutions of pentachlorophenol in oils used "have at least equivalent fungicidal properties to 50/50 creosote-petroleum solutions . . ."

The policy the CNR is following in the treatment of ties with penta "is purely an economical one and has been made possible because of the availability of suitable petroleum oil within close proximity of Edmonton at attractive prices. The intent has been to find a lower cost preservative equal to standard 50/50 creosote-petroleum mixture and thus introduce competition in the treating industry." To date, said Mr. Bromley, the CNR has treated 1,970,000 ties with penta at its plant at Edmonton, Alta.

Editors Afield

Passenger promotion took some new twists in the Northeast last month, and Associate Editor Rod Craib was along for the ride. On the Reading, Oct. 25, he joined 974 other travelers with a passion for soot and cinders in a steam excursion. On the New York Central two days later he was part of the press contingent on an introductory run of the Central's new Sleepercoach service.

*

Something old. In life, steam locomotives may have been noisy, dirty and generally undesirable, but in memory's eye, their image has changed for a lot of people, not all of them rail fans. So when the Reading brought one of its T-1 class steamers out of retirement last month for a passenger excursion, 975 ticket holders filled the train and uncounted thousands (estimated by Reading P-R man Bob Crompton as 50,000) lined up along the right-of-way to watch the steam train go by.

"These excursions," says Passenger Traffic Manager W. D. D. Prince, "were brought about by popular demand of many rail fans, and others who wanted to see and hear a steam locomotive again." The original idea came from President Joseph A. Fisher, who wondered why a venture that appeared to be profitable for an outside sponsor would not also be profitable under railroad sponsorship.

Reading passenger people did some extensive research before announcing the trip, then aimed for the widest fan appeal. Among the features: a chance for camera fans (all present were in this category) to get off and get a picture of the engine in action, an open door on a combo near the engine (for audio enthusiasts who recorded the huffs and puffs for posterity) and souvenir bandannas and Reading-emblem caps for all ticket holders.

A topographical map of part of the route was delivered to Public Relations Director Harry Hammer before the trip with a request from the sender that Mr. Hammer find out the precise time the train would pass a particular spot near Port Clinton. The writer explained that he was a pilot and photographer as well as a railfan and that he planned to meet the train at that spot and take aerial views. Mr. Hammer sent him the information he wanted, and when the special started up the grade out of Port Clinton, the plane was overhead.

Every ticket was sold well in advance, and the road finally added a 16th car to the 15 originally planned. With locomotive 2124 and all cars fully depreciated, and with full fares sold at $9, the Reading seemed likely to gain revenue as well as good will from the trip. (And as someone aboard the train remarked, with the steel strike continuing, the road might well make steam trips a regular feature just to keep some cash coming in.)

Something new. The "Sleepercoach Press Run" from Grand Central to Grand Central via Syracuse was one part of the New York Central's campaign to launch its new Sleepercoach service. To demonstrate the cars' features, 11 reporters (representing New York, Boston and Newark papers, a wire service and Railway Age) were asked to board the car Tuesday night, ride with it on the "Wolverine" to Syracuse and return with it on the eastbound "Wolverine" Wednesday morning.

Seven Central men (including Bill Main of the passenger department, Advertising Director Cliff Ramsdell, and Bob Eisenhauer and Dick Marshall of public relations) along with Goodrich Murphy, Joe Kelly and Bob Sherman of the Budd Co. were on hand to provide a running commentary. Overcoming traditional press skepticism, the car proved its point — Sleepercoaches are comfortable.

The Sleepercoach campaign, Dick Marshall says, includes newspaper ads, direct mail, posters and exhibits and has generated substantial interest. The cars were shown in eight cities before going into service Nov. 1, drew 21,000 people for a guided tour.

Entrance to the Sleepercoach exhibit was through a standard reclining-seat daycoach, where the point was stressed that the private room accommodations cost only $7 more single and $12.60 double than a reclining seat. A 36-in. realistic plastic doll in a Sleepercoach crib (available in all rooms) was the big crowd stopper, and drew comment on separate TV reports in six different cities.

Service (New York-Chicago on the "20th Century" and Boston-Chicago on the "New England States") has been sold out, so far, on every run.

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1959

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1959	1958	Operating Expenses: Maint. Way and Structures: Total 1959	1958	Deprec. and Retirements	Maint. Equipment: Total 1959	1958	Deprec. and Retirements	Traffic	Transportation	Total 1959	1958	Operating ratio 1959	1958	Net from railway operation	Railway tax accruals	Net Railway operating income 1959	1958
Akron, Canton & Youngstown	Aug.	171	430	....	443	485	53	54	6	76	73	15	48	143	365	361	82.5	74.4	77	49	15	35
	8 mos.	171	3,979	....	4,087	3,305	477	411	45	600	517	119	355	1,239	3,035	2,768	74.3	83.8	1,052	585	312	77
Alabama, Tenn. & Northern	Aug.	214	253	....	255	240	50	50	6	11	24	6	5	85	154	163	60.3	67.7	101	26	12	11
	8 mos.	214	2,242	....	2,314	1,966	399	396	51	93	202	45	35	666	1,221	1,360	52.8	69.2	1,093	295	195	74
Atchison, Topeka & Santa Fe	Aug.	12,996	37,330	4,533	46,951	47,150	6,820	6,777	435	11,116	9,176	2,426	1,451	19,727	41,686	37,743	88.8	80.0	5,265	2,745	2,068	5,011
	8 mos.	13,058	362,603	27,391	428,059	378,936	54,023	46,852	6,679	85,260	75,278	18,361	11,215	150,169	319,801	287,852	74.7	76.0	108,259	61,253	40,565	37,370
Atlanta & St. Andrews Bay	Aug.	81	351	....	356	370	38	42	3	30	30	8	7	79	175	173	49.1	46.7	181	84	58	70
	8 mos.	81	2,641	....	2,681	2,778	324	277	28	248	236	63	58	607	1,412	1,299	52.7	46.8	1,268	582	409	510
Atlanta & West Point	Aug.	93	246	26	324	302	37	37	8	59	52	12	17	134	267	295	82.5	97.8	57	18	23	—31
	8 mos.	93	1,934	184	2,536	2,399	328	296	63	422	420	112	143	1,066	2,129	2,199	84.0	91.7	406	142	85	—127
Western Ry. of Alabama	Aug.	133	287	23	346	317	49	44	10	58	52	19	19	137	284	265	81.9	83.6	63	49	23	21
	8 mos.	133	2,340	169	2,817	2,597	407	361	77	473	454	151	161	1,105	2,316	2,228	82.2	85.8	502	346	159	133
Atlantic Coast Line	Aug.	5,300	9,808	1,135	11,808	11,341	1,751	1,776	185	2,334	2,294	634	464	4,932	10,115	10,037	85.7	88.5	1,693	650	629	801
	8 mos.	5,302	86,329	10,525	104,816	98,973	14,997	14,487	1,701	19,008	18,713	4,955	3,818	41,628	85,058	83,058	81.1	83.9	19,758	8,475	6,862	4,876
Charleston & West. Carolina	Aug.	343	496	....	508	520	102	121	7	85	86	28	19	180	403	423	79.5	81.3	104	100	28	33
	8 mos.	343	4,372	....	4,466	4,613	979	923	62	743	678	229	166	1,447	3,468	3,285	77.7	71.2	997	640	347	467
Baltimore & Ohio	Aug.	5,917	26,099	1,250	29,847	33,666	3,163	3,412	468	5,445	5,795	1,093	839	13,463	24,812	26,458	83.1	78.6	5,034	2,192	1,128	3,190
	8 mos.	5,917	237,480	9,955	266,632	251,051	29,142	25,278	3,985	48,225	42,833	8,895	7,726	113,044	214,283	201,665	80.4	80.3	52,349	17,209	20,516	18,637
Staten Island Rap. Tran.	Aug.	29	188	82	275	274	42	58	12	43	32	2	2	160	279	293	101.4	107.0	—4	51	—76	—88
	8 mos.	29	1,475	671	2,198	2,260	423	434	96	316	291	14	17	1,260	2,284	2,258	103.9	99.9	—86	390	—653	—549
Bangor & Aroostook	Aug.	602	650	30	724	641	159	126	20	242	255	110	33	278	790	769	109.1	120.0	—66	92	134	148
	8 mos.	602	8,948	192	9,491	10,455	2,286	2,494	157	2,272	2,284	905	261	2,877	8,386	8,679	88.4	83.0	1,105	742	1,308	1,826
Bessemer & Lake Erie	Aug.	203	320	....	386	2,216	240	258	21	544	456	142	36	310	1,268	1,398	328.6	63.1	—882	Cr.187	—272	566
	8 mos.	203	14,371	....	14,876	10,392	1,952	1,985	178	5,141	4,048	1,116	309	3,711	12,310	10,916	82.8	105.0	2,567	3,631	2,281	313
Boston & Maine	Aug.	1,570	4,325	634	5,295	6,347	770	720	158	816	826	281	150	2,561	4,632	4,889	87.5	77.0	663	517	—339	555
	8 mos.	1,570	39,522	5,029	49,232	50,877	6,351	7,424	1,256	7,001	6,981	2,208	1,200	22,194	39,834	43,034	80.9	84.6	9,398	3,961	1,223	—221
C. P. R. in Maine	Aug.	234	466	66	563	463	125	105	20	81	57	17	23	161	418	379	74.3	81.9	145	36	53	—24
	8 mos.	234	5,736	362	6,328	5,465	1,060	991	162	894	807	139	85	1,539	3,762	3,617	59.5	66.2	2,566	279	1,641	970
Carolina & Northwestern	Aug.	285	264	....	269	266	45	41	7	31	34	21	5	78	178	167	66.3	62.7	91	15	30	76
	8 mos.	285	2,153	....	2,201	2,055	369	388	54	248	242	169	43	605	1,424	1,404	64.7	68.3	777	160	226	286
Central of Georgia	Aug.	1,745	3,308	145	3,631	3,473	586	594	46	746	636	188	173	1,472	3,163	3,051	87.1	87.8	467	277	240	297
	8 mos.	1,752	26,918	1,009	29,475	27,908	4,624	4,650	349	5,600	5,178	1,514	1,406	11,716	24,889	24,350	84.4	87.3	4,586	2,113	2,535	2,060
Central of New Jersey	Aug.	597	3,478	469	4,276	4,742	448	570	94	706	795	180	76	2,135	3,586	3,841	83.9	81.0	690	341	130	225
	8 mos.	597	28,623	3,854	35,132	35,469	4,014	4,273	762	6,390	6,171	1,318	602	17,263	30,120	30,015	85.7	84.6	5,012	3,463	—190	145
Central Vermont	Aug.	375	759	70	897	904	222	259	18	100	92	9	19	354	733	764	81.7	84.5	164	62	—15	—55
	8 mos.	375	6,094	414	7,113	7,046	1,540	2,072	147	887	852	75	157	2,834	5,734	6,311	80.6	89.6	1,379	428	—28	—854
Chesapeake & Ohio	Aug.	5,122	24,862	616	27,387	32,847	3,100	3,350	475	4,915	4,797	1,865	775	10,447	20,931	21,391	76.4	65.1	6,456	2,918	4,015	6,655
	8 mos.	5,122	217,387	4,144	233,940	226,467	25,730	24,490	3,909	40,979	38,880	14,953	6,613	85,680	172,450	166,877	73.7	73.7	61,490	28,072	37,090	36,114
Chicago & Eastern Illinois	Aug.	862	2,362	220	2,830	3,071	361	379	29	513	467	171	148	1,174	2,359	2,350	83.4	76.5	471	247	—22	207
	8 mos.	862	20,972	1,395	24,508	23,244	2,891	2,976	239	3,995	3,904	1,295	1,160	9,634	19,039	18,901	77.7	81.3	5,469	1,761	1,854	949
Chicago & Illinois Midland	Aug.	121	654	....	665	498	42	40	9	93	99	23	30	149	363	339	54.5	68.0	303	180	116	58
	8 mos.	121	4,663	....	4,799	3,964	341	313	62	801	827	185	242	1,181	2,916	2,843	61.0	71.7	1,862	1,058	737	398
Chicago & North Western	Aug.	9,286	14,840	1,775	18,312	20,566	2,883	3,011	417	3,274	3,154	1,009	536	7,538	15,253	15,182	83.3	73.8	3,060	1,471	562	2,582
	8 mos.	9,287	122,271	12,468	147,021	139,824	23,922	20,985	3,133	24,824	22,790	7,961	4,387	62,698	124,723	117,168	84.8	83.8	22,298	10,738	4,394	4,693
Chicago, Burl. & Quincy	Aug.	8,681	17,748	2,302	22,443	23,486	3,006	2,984	351	4,007	3,751	1,063	643	8,930	17,684	16,738	78.8	71.3	4,759	2,221	1,712	2,678
	8 mo.s	8,686	144,452	13,896	175,304	163,393	24,712	21,601	3,222	34,649	29,730	8,351	5,212	69,790	142,717	130,036	81.4	79.6	32,587	16 244	12,145	13,645
Chicago Great Western	Aug.	1,469	2,746	12	2,937	3,103	456	476	42	413	488	129	123	1,022	2,097	2,165	71.4	69.8	840	334	285	356
	8 mos.	1,469	21,322	70	22,925	23,191	3,355	3,650	354	3,416	3,465	1,045	1,013	7,680	16,122	16,226	70.3	70.0	6,802	2,432	2,559	2,828
Chic., Milw., St. Paul & Pac.	Aug.	10,595	18,014	1,782	21,880	23,473	3,808	3,900	419	3,.75	3,503	916	559	8,322	17,777	17,826	81.2	75.9	4,013	1,578	1,442	3,035
	8 mos.	10,592	136,496	10,327	163,234	157,064	26,447	24,782	3,297	28,598	28,204	6,103	4,453	65,601	135,147	131,549	82.8	83.8	28,088	13,051	8,331	6,681
Chicago, R. I. & Pac.	Aug.	7,524	13,815	1,675	17,258	17,611	2,614	2,591	274	2,880	2,987	640	515	6,979	13,935	13,899	80.7	78.9	3,323	1,322	527	1,168
	8 mos.	7,541	127,320	11,352	152,204	137,319	19,843	16,995	2,120	25,784	23,406	5,030	4,483	59,440	117,536	106,647	77.2	77.7	34,668	14,618	8,194	8,595
Clinchfield	Aug.	293	1,699	....	1,713	1,635	185	236	22	349	304	106	69	431	1,101	1,081	64.2	66.1	613	198	573	506
	8 mos.	293	14,050	5	14,136	13,599	1,713	1,813	176	2,553	2,604	852	518	3,541	8,861	8,768	62.7	64.5	5,275	1,641	4,812	4,469
Colorado & Southern	Aug.	712	974	100	1,235	1,591	251	184	17	290	212	80	36	539	1,185	1,076	96.0	67.6	50	54	18	225
	8 mos.	714	9,186	547	10,910	10,051	2,173	1,371	212	1,924	1,598	590	295	4,410	9,399	7,904	86.2	78.6	1,511	865	440	883
Ft. Worth & Denver	Aug.	1,362	1,889	199	2,313	2,208	259	234	31	284	231	47	72	920	1,664	1,520	71.9	68.9	649	242	147	198
	8 mos.	1,362	13,981	1,153	16,962	16,019	3,030	2,279	240	2,323	2,252	367	640	6,864	13,878	12,410	81.8	77.5	3,084	876	353	861
Colorado & Wyoming	Aug.	39	23	....	41	346	5	19	2	18	30	12	2	19	58	181	141.7	52.3	—17	Cr.7	—22	63
	8 mos.	39	1,571	....	2,656	2,194	153	141	16	279	239	99	15	896	1,467	1,334	55.3	60.8	1,188	705	449	299
Delaware & Hudson	Aug.	764	3,255	160	3,574	3,768	437	400	61	591	585	217	101	1,361	2,773	2,803	77.6	74.4	801	368	523	549
	8 mos.	764	28,620	1,037	30,850	30,333	3,398	3,745	483	5,527	5,188	1,566	844	11,572	23,644	23,904	76.6	78.8	7,206	3,478	4,121	2,576
Delaware, Lack. & Western	Aug.	918	4,192	718	5,609	6,285	509	721	143	994	1,082	345	184	3,045	5 107	5,650	91.1	89.9	501	707	—292	—30
	8 mos.	918	36,346	6,031	48,090	51,130	4,356	5,820	1,233	8,201	8,568	2,779	1,570	25,061	42,257	45,998	87.9	90.0	5,834	5,364	—443	—1,504
Denver & Rio Grande Western	Aug.	2,128	5,877	402	6,523	7,501	664	890	95	867	992	322	240	2,064	4,149	4,651	63.6	62.0	2,373	1,312	975	1,330
	8 mos.	2,131	46,508	2,065	50,330	47,973	6,121	5,876	820	7,551	7,376	2,565	1,905	16,386	34,437	32,919	68.4	68.6	15,893	8,726	7,245	7,290
Detroit & Toledo Shore Line	Aug.	50	492	....	543	510	57	49	4	76	68	24	20	223	392	346	72.2	67.9	151	53	20	8
	8 mos.	50	4,967	....	5,346	4,431	498	488	31	679	564	191	165	1,879	3,359	3,042	62.8	68.6	1,987	730	409	196
Detroit, Toledo & Ironton	Aug.	465	1,305	....	1,373	1,355	185	169	27	365	301	148	53	443	1,136	1,050	82.7	77.5	237	132	112	164
	8 mos.	465	14,157	....	14,896	10,776	2,038	1,607	226	3,219	2,728	1,046	440	4,039	10,501	8,994	70.5	83.5	4,395	923	3,171	1,096
Duluth, Miss. & Iron Range	Aug.	557	317	1	439	6,342	408	510	76	482	605	207	13	577	1,724	2,813	393.0	44.4	—1,286	Cr.648	—638	1,281
	8 mos.	557	21,172	7	24,916	22,822	4,033	3,992	579	4,688	5,010	1,562	105	8,331	19,243	18,892	77.2	82.8	5,674	3,762	1,754	1,019
Duluth, South Shore & Atl.	Aug.	544	442	3	477	646	127	116	10	102	105	26	32	213	501	492	105.0	76.2	—24	Cr.20	—15	121
	8 mos.	544	4,451	19	4,765	4,345	942	848	82	896	813	209	265	1,654	3,961	3,781	83.1	87.0	804	252	428	249

(Continued on page 30)

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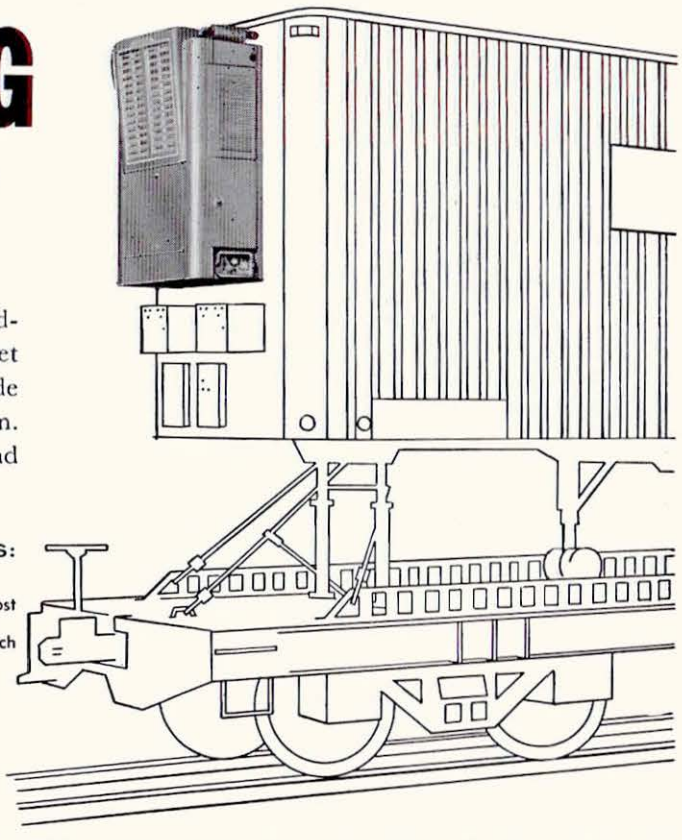

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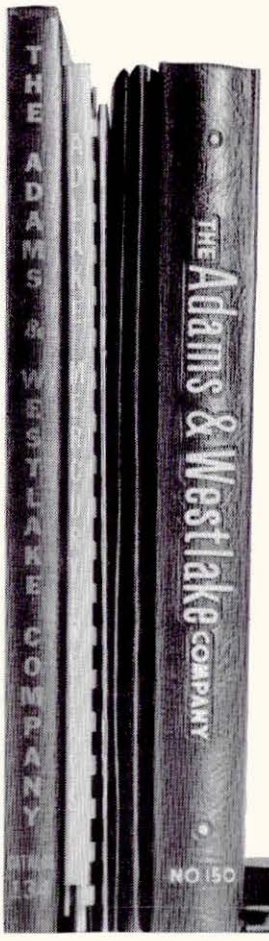

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REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1959

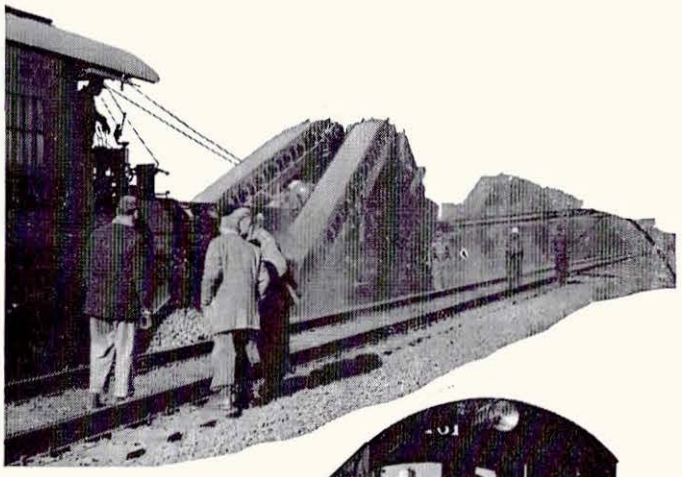
Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1959	Total (inc. misc.) 1958	Operating Expenses: Maint. Way and Structures: Total 1959	Total 1958	Deprec. and Retirements	Maint. Equipment: Total 1959	Total 1958	Deprec. and Retirements	Traffic	Transportation	Total 1959	Total 1958	Operating ratio 1959	Operating ratio 1958	Net from railway operation	Railway tax accruals	Net Railway operating income 1959	Net Railway operating income 1958
Duluth, Winnipeg & Pacific	Aug.	175	511	1	517	497	191	120	5	60	54	1	7	192	459	376	88.8	75.6	58	45	—69	11
	8 mos.	175	3,893	5	3,937	3,950	889	681	41	477	486	10	60	1,464	2,975	2,727	75.5	69.0	962	340	—48	249
Elgin, Joliet & Eastern	Aug.	205	1,055	....	1,149	3,505	174	291	28	265	571	61	51	692	1,485	2,537	129.2	72.4	—336	Cr. 7	—209	485
	8 mos.	205	25,578	....	34,022	26,570	2,408	2,051	226	6,020	7,965	833	360	13,099	24,642	23,277	72.4	87.6	9,380	4,993	2,336	255
Erie	Aug.	2,233	9,712	582	11,368	12,785	1,440	1,638	228	2,104	1,945	554	362	5,976	10,645	10,812	93.6	84.6	724	1,238	—1,277	261
	8 mos.	2,204	91,194	4,393	104,244	98,986	11,883	11,104	1,822	17,130	15,641	4,352	2,904	50,349	88,433	84,217	84.8	85.1	15,812	9,444	360	—666
Florida East Coast	Aug.	572	1,706	309	2,200	2,440	335	404	47	433	516	118	89	956	1,978	2,143	89.9	87.8	222	218	—179	—86
	8 mos.	572	17,352	3,394	22,798	23,441	3,325	3,245	378	4,423	4,339	941	712	8,936	18,814	18,625	82.5	79.5	3,984	1,678	505	1,299
Georgia Railroad	Aug.	321	597	25	713	660	85	86	7	121	105	30	39	317	599	563	84.0	85.2	114	44	100	92
	8 mos.	321	4,578	132	5,424	5,094	756	684	67	990	873	274	323	2,520	4,889	4,518	90.1	88.7	535	321	333	474
Georgia & Florida	Aug.	321	272	....	277	309	62	57	3	38	33	8	22	89	231	215	83.4	69.4	46	20	4	53
	8 mos.	321	2,303	....	2,357	2,162	603	576	30	330	282	64	182	745	2,020	1,835	85.7	84.9	337	147	—22	21
Grand Trunk Western	Aug.	951	3,510	275	4,230	3,733	763	759	72	815	771	110	92	2,278	4,202	4,018	99.3	107.1	28	428	—1,039	—1,134
	8 mos.	951	35,009	1,774	40,233	34,965	5,583	5,679	582	7,287	6,736	888	763	19,655	35,315	33,241	87.8	95.1	4,918	3,172	—3,068	—5,566
Great Northern	Aug.	8,291	20,363	1,110	22,934	25,344	4,148	3,405	372	4,171	3,802	881	551	8,005	17,957	16,782	78.3	66.2	4,977	3,002	1,360	4,136
	8 mos.	8,293	149,510	6,904	168,116	155,114	27,851	24,850	2,552	31,981	30,969	6,972	4,516	60,461	133,150	126,249	79.2	81.4	34,965	20,254	12,229	10,968
Green Bay & Western	Aug.	219	398	....	412	358	83	78	5	50	52	9	28	126	318	296	77.1	82.4	94	48	16	8
	8 mos.	219	3,108	....	3,182	3,066	509	587	37	378	398	70	227	979	2,308	2,334	72.5	76.1	874	440	213	190
Gulf, Mobile & Ohio	Aug.	2,752	6,006	268	6,707	6,885	850	990	73	1,289	1,203	297	300	2,296	5,105	5,225	76.1	75.9	1,602	788	447	734
	8 mos.	2,752	49,050	1,873	54,612	52,321	7,292	7,368	601	10,854	10,688	2,392	2,435	18,468	42,027	42,224	77.0	80.7	12,858	5,711	3,574	2,879
Illinois Central	Aug.	6,500	17,616	2,102	21,884	22,606	2,860	3,068	407	3,875	3,887	798	624	8,391	16,745	17,087	76.5	75.6	5,139	2,914	1,731	2,439
	8 mos.	6,446	145,840	14,892	178,176	170,667	26,216	24,204	3,230	33,436	32,126	6,817	5,086	69,214	143,021	138,546	80.3	81.2	35,155	18,654	11,699	11,548
Illinois Terminal	Aug.	334	873	....	946	1,067	110	106	3	143	164	31	46	374	733	743	77.5	69.7	213	68	20	94
	8 mos.	334	6,476	....	7,160	7,666	852	875	23	1,523	1,150	245	387	2,883	6,100	5,746	85.2	75.0	1,060	225	—38	594
Kansas City Southern	Aug.	891	3,244	100	3,708	3,262	269	229	44	493	412	112	94	1,175	2,164	1,918	58.4	58.8	1,544	630	641	576
	8 mos.	891	27,106	606	30,590	28,001	2,414	2,156	377	4,106	3,788	864	780	9,392	17,727	16,605	57.9	59.3	12,863	5,291	5,384	4,869
Kansas, Oklahoma & Gulf	Aug.	327	351	....	352	406	76	67	7	29	25	12	33	93	259	235	73.6	58.0	93	45	15	71
	8 mos.	327	3,738	....	3,755	3,423	512	542	61	279	220	95	277	766	2,062	1,976	54.9	57.7	1,692	737	598	543
Lake Superior & Ishpeming	Aug.	160	75	....	82	617	59	53	12	57	47	35	3	54	193	234	235.5	39.7	—111	—53	—44	245
	8 mos.	160	2,418	....	2,947	2,390	702	468	90	527	530	240	18	809	2,214	1,824	75.1	76.3	733	493	368	292
Lehigh & Hudson River	Aug.	96	272	....	273	289	29	34	2	28	36	8	15	111	198	207	72.5	71.6	75	35	10	11
	8 mos.	96	2,244	....	2,247	2,138	248	274	21	238	295	67	128	894	1,636	1,680	72.8	78.6	611	257	77	—27
Lehigh & New England	Aug.	177	526	....	532	575	62	71	7	179	139	46	18	216	523	517	98.3	89.9	9	39	74	225
	8 mos.	177	3,952	....	3,994	4,320	504	513	56	1,309	1,078	399	153	1,667	4,027	3,867	100.9	89.5	—35	275	702	1,040
Lehigh Valley	Aug.	1,127	3,803	120	4,159	5,121	433	521	96	591	915	146	138	2,263	3,638	4,367	87.5	85.3	521	472	4	79
	8 mos.	1,128	33,234	1,262	36,697	37,998	4,375	4,991	796	6,390	6,711	1,445	1,125	19,577	33,303	34,999	90.8	92.1	3,394	3,668	—1,509	—2,938
Long Island	Aug.	344	1,008	4,831	6,080	5,738	817	735	116	1,102	1,043	169	41	2,893	5,076	4,799	83.5	83.6	1,003	430	349	388
	8 mos.	344	8,393	35,987	45,951	44,785	6,464	6,367	817	8,827	8,782	1,349	351	23,327	40,664	39,684	88.5	88.6	5,287	3,058	552	672
Louisiana & Arkansas	Aug.	746	2,029	45	2,184	2,044	189	150	22	323	279	98	76	714	1,376	1,263	63.0	61.8	809	427	271	286
	8 mos.	746	15,757	336	16,921	15,913	1,582	1,520	164	2,401	2,359	787	634	5,453	10,696	10,943	63.2	65.9	6,224	3,206	2,209	1,909
Louisville & Nashville	Aug.	5,697	15,391	909	17,645	18,517	2,501	2,517	296	3,242	3,735	1,135	483	7,401	14,507	15,111	82.2	81.6	3,137	2,535	1,336	1,757
	8 mos.	5,697	134,935	5,833	152,226	145,370	21,365	21,580	2,411	31,387	30,912	8,915	3,961	60,415	124,282	124,722	81.6	85.8	27,944	20,551	11,472	10,506
Maine Central	Aug.	936	1,685	73	1,901	1,874	350	356	28	363	360	84	31	717	1,567	1,622	82.5	86.5	333	207	136	83
	8 mos.	943	15,160	467	16,634	17,135	2,939	3,032	226	3,018	3,055	671	241	6,318	13,484	13,771	81.1	80.4	3,150	1,639	1,139	1,168
Minneapolis & St. Louis	Aug.	1,391	1,747	....	1,798	2,156	320	299	26	285	309	101	120	638	1,492	1,520	83.0	70.5	306	153	124	260
	8 mos.	1,391	14,201	8	14,664	14,856	2,316	2,264	239	2,605	2,391	807	949	5,204	12,249	11,622	83.5	78.2	2,415	1,372	966	1,174
Minn., Northfield & Southern	Aug.	77	316	....	330	439	32	26	2	34	34	13	32	94	229	207	69.5	47.1	101	61	35	95
	8 mos.	77	2,848	....	2,981	2,992	188	178	19	323	311	102	258	780	1,831	1,682	61.4	56.2	1,150	639	428	521
Minn., St. P. & S. Ste. Marie	Aug.	3,222	3,722	115	4,061	4,006	875	620	63	603	506	144	123	1,520	3,343	2,888	82.3	72.1	718	343	244	786
	8 mos.	3,222	26,044	542	28,124	27,117	5,477	5,357	427	5,640	5,189	1,125	904	11,444	25,145	23,991	89.4	88.5	2,979	2,269	145	559
Missouri Illinois	Aug.	172	417	....	426	408	48	70	4	82	91	40	14	129	287	302	67.4	74.0	139	121	73	66
	8 mos.	172	3,604	....	3,645	3,130	353	552	40	720	709	303	109	1,024	2,312	2,354	63.4	75.2	1,333	1,019	716	498
M-K-T Lines	Aug.	2,918	4,513	92	5,003	5,176	480	526	82	1,091	1,190	263	177	1,786	3,740	3,867	74.8	74.7	1,262	354	329	393
	8 mos.	2,918	36,425	605	40,357	40,379	4,520	4,219	699	8,254	7,689	2,091	1,467	14,160	30,162	30,296	74.7	75.0	10,195	2,762	2,818	2,825
Missouri Pacific	Aug.	9,423	21,884	1,216	25,699	24,021	3,618	3,509	354	4,485	4,026	1,092	694	9,695	19,506	18,468	75.9	76.9	6,193	2,494	2,737	3,001
	8 mos.	9,472	177,636	7,590	204,399	190,558	27,701	28,944	2,702	35,068	33,296	8,677	5,501	78,443	154,758	149,280	75.7	78.3	49,641	17,209	22,043	20,409
Monon	Aug.	541	1,409	31	1,544	1,662	256	256	20	259	280	77	95	613	1,319	1,407	85.4	84.7	225	96	76	103
	8 mos.	541	12,084	297	13,308	12,937	1,916	1,745	172	2,597	2,258	612	814	5,400	11,341	11,023	85.2	85.2	1,967	736	708	627
Monongahela	Aug.	177	526	....	529	453	73	74	13	61	54	11	1	150	299	329	56.6	72.6	230	18	130	—14
	8 mos.	177	3,399	....	3,420	3,120	537	536	100	447	446	88	8	1,373	2,511	2,375	73.4	76.1	909	126	345	—347
New York Central	Aug.	10,361	37,286	5,961	51,387	55,708	5,730	5,522	1,082	11,100	9,700	2,430	979	25,247	45,940	45,719	89.4	82.1	5,447	5,996	—1,990	2,978
	8 mos.	10,432	351,362	47,067	464,183	421,617	49,982	47,182	8,672	86,800	76,400	19,155	8,324	218,274	387,877	369,105	83.6	87.5	76,306	45,671	17,553	—6,319
Pitts. & Lake Erie	Aug.	221	1,000	32	1,085	2,945	338	391	73	525	904	331	64	718	1,852	2,684	170.7	91.1	—767	Cr.100	113	963
	8 mos.	221	21,671	274	23,165	20,027	3,019	3,433	486	7,025	7,105	2,609	521	8,868	21,107	21,264	91.1	106.2	2,057	3,917	6,040	4,284
New York, Chic. & St. Lou.	Aug.	2,170	9,906	157	10,570	12,067	1,246	1,203	157	1,850	1,842	476	377	4,418	8,356	8,468	79.1	70.2	2,214	1,049	756	1,385
	8 mos.	2,173	96,326	1,137	101,374	89,880	11,235	10,291	1,306	16,778	15,325	3,694	2,841	38,268	73,000	68,577	72.0	76.3	28,374	13,810	11,335	7,965
New York, N. H. & Hartford	Aug.	1,762	5,593	3,676	10,883	12,385	1,570	1,548	295	1,600	1,813	410	223	5,677	9,947	10,200	91.4	82.4	936	1,079	—1,531	—113
	8 mos.	1,762	53,116	31,033	97,701	97,648	11,746	11,902	2,295	14,434	15,398	3,724	1,902	47,411	83,009	83,668	85.0	85.7	14,692	7,993	—4,669	—3,971
New York Connecting	Aug.	21	268	....	298	351	79	182	25	14	16	....	....	92	189	288	63.4	82.1	109	87	—2	—43
	8 mos.	21	2,475	....	2,694	2,846	503	968	203	111	135	....	....	710	1,354	1,836	50.3	64.5	1,340	708	445	132
New York, Sus. & Western	Aug.	100	284	16	316	325	42	38	6	55	48	11	8	164	301	295	95.2	91.0	15	36	—62	—41
	8 mos.	105	2,424	141	2,684	2,734	331	310	49	429	436	84	69	1,377	2,444	2,466	91.1	90.2	240	255	—320	—291

(Continued on page 32)

PROGRESS REPORT

SPENO

Here are the up-to-date facts on the SPENO Ballast Cleaning and the SPENO Rail Grinding Services.



BALLAST CLEANING

SPENO Engineering and Research has developed a superior screening arrangement so that we are now using an improved Ballast Cleaner with greater efficiency.

RAIL GRINDING

Our Rail Grinding Service has been so well received we are now building a *THIRD* Rail Grinding Train to take care of the increased demand.

SPENO is constantly developing means for better service to make sure that the Railroads receive everything they pay for — and more

Just Ask the Railroads That have used us!

GEARED TO PROGRESS
P I
MEMBER

FRANK SPENO RAILROAD BALLAST CLEANING CO., INC.

Clark Street
East Syracuse, N. Y.

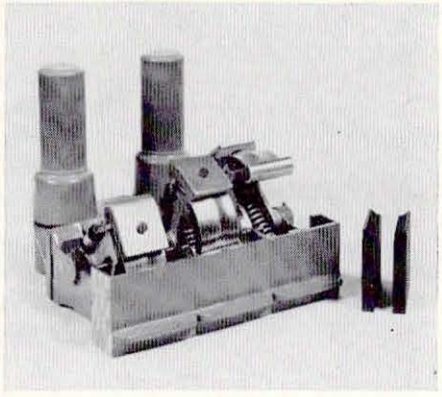
306 North Cayuga St.
Ithaca, N. Y.

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)
MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1959

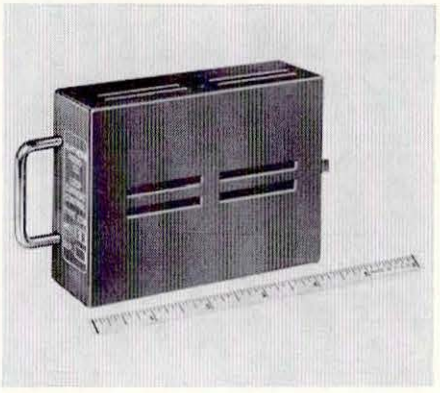
Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1959	1958	Operating Expense: Maint. Way and structures: Total 1959	Total 1958	Deprec. and Retirements	Maint. Equipment: Total 1959	Total 1958	Deprec. and Retirements	Traffic	Transportation	Total 1959	Total 1958	Operating ratio 1959	1958	Net from railway operation	Railway tax accruals	Net railway operating income 1959	1958
Norfolk & Western	Aug.	2,138	14,285	245	15,293	19,118	1,508	2,016	341	2,599	2,658	1,166	324	4,254	9,424	10,538	61.6	55.1	5,869	2,557	4,346	4,893
	8 mos.	2,138	127,341	1,730	135,443	132,809	14,581	17,592	2,842	23,359	26,571	8,896	2,795	37,293	84,292	93,295	62.2	70.2	51,151	28,124	32,818	22,336
Norfolk Southern	Aug.	592	826	....	837	837	178	191	17	136	117	40	50	269	696	683	83.2	81.6	141	72	57	50
	8 mos.	592	6,306	....	6,403	5,850	1,517	1,436	108	1,050	987	272	407	2,106	5,591	5,229	87.3	89.4	812	435	170	—18
Northern Pacific	Aug.	6,833	15,233	633	17,038	17,025	2,813	1,995	524	2,669	2,560	774	380	6,224	12,997	11,709	76.3	68.8	4,041	2,451	1,451	3,163
	8 mos.	6,829	109,324	4,096	122,060	112,689	19,156	15,502	3,142	21,829	21,895	6,076	3,320	47 865	99,575	93,033	81.6	82.6	22,485	15,343	8,952	9,410
Northwestern Pacific	Aug.	328	1,290	1	1,302	1,256	206	185	18	79	93	3	7	375	693	665	53.2	52 9	609	258	154	170
	8 mos.	328	9,367	4	9,444	7,813	1,697	2,024	166	675	630	20	64	2,739	5,377	5,502	56.9	70.4	4,067	1,594	911	304
Pacific Electric	Aug.	361	921	....	1,050	1,048	181	133	24	66	50	4	20	617	987	832	94.0	79.4	63	130	—203	—27
	8 mos.	360	8,411	....	9,567	8,372	1,481	1,342	189	453	479	28	168	4,583	7,498	6,951	78.4	83.0	2,069	995	—50	—370
Pennsylvania	Aug.	9,920	48,810	8,707	66,219	73,873	6,654	7,061	1,443	13,602	13,065	2,975	1,188	31,136	56,603	58,571	85.5	79.3	9,615	6,032	—1,241	5,647
	8 mos.	9,920	459,947	70,898	600,685	543,612	59,264	60,981	11,662	120,800	109,181	23,788	9,839	272,628	496,268	477,583	82.6	87.9	104,417	45,495	19,806	—4,320
Penn.-Reading S. S. Lines	Aug.	338	498	198	726	833	217	179	82	143	123	26	10	515	944	889	130.0	106.7	—218	78	—473	—299
	8 mos.	349	4,455	819	5,432	5,461	1,855	1,661	645	1,052	969	207	68	3,929	7,333	6,953	135.0	127.3	—1,902	578	—3,775	—3,260
Piedmont & Northern	Aug.	126	421	....	430	420	40	49	5	36	30	10	31	88	232	218	53.9	52.0	198	107	49	69
	8 mos.	126	3,672	....	3,748	3,266	338	379	37	276	225	76	249	712	1,853	1,744	49.4	53.4	1,895	975	537	443
Pittsburgh & West Virginia	Aug.	132	360	....	363	664	133	145	25	152	157	45	63	166	566	686	155.9	103.3	—203	Cr.66	—69	2
	8 mos.	132	5,622	....	5,680	5,265	1,157	1,079	198	1,284	1,191	363	601	1,779	5,303	5,078	93.4	96.4	377	211	321	275
Reading	Aug.	1,303	6,442	438	7,570	8,817	1,110	1,059	195	1,553	1,412	482	184	3,639	6,938	6,900	91.7	78.3	632	119	386	1,036
	8 mos.	1,303	62,854	3,978	71,735	69,886	9,047	9,835	1,557	13,916	12,799	3,795	1,542	32,115	60,343	60,628	84.1	86.8	11,392	3,458	5,096	4,939
Richmond, Fred. & Potomac	Aug.	118	1,205	457	1,951	1,855	155	145	27	291	286	67	28	676	1,280	1,300	65.6	70.0	671	417	202	168
	8 mos.	118	10,177	3,464	16,194	15,592	1,198	1,332	169	2,309	2,270	529	235	5,733	10,722	10,929	66.2	70.1	5,472	3,188	1,591	1,295
Rutland	Aug.	391	328	....	377	377	79	79	9	54	48	18	26	150	335	338	95.2	89.6	17	33	—12	9
	8 mos.	391	2,877	....	3,087	3,008	621	570	71	478	460	142	241	1,267	2,824	2,752	91.5	91.5	263	239	—9	—2
St. Louis-San Francisco	Aug.	4,558	8,887	258	9,894	9,443	1,603	1,446	213	1,776	1,560	605	355	4,076	8,408	7,631	85.0	80.8	1,486	431	791	1,218
	8 mos.	4,571	72,879	1,791	80,375	72,982	12,547	10,417	1,480	13,682	12,482	4,860	2,849	31,381	65,207	60,705	81.1	83.2	15,168	5,979	7,721	6,671
St. Louis-S. F. & Texas	Aug.	143	441	3	465	328	33	36	8	31	23	1	22	154	251	238	53.9	72.4	214	96	73	10
	8 mos.	143	3,320	24	3,529	2,910	212	354	36	232	197	9	185	1,227	1,940	2,029	55.0	69.7	1,589	642	480	143
St. Louis Southwest. Lines	Aug.	1,556	5,472	8	5,575	4,678	585	704	83	705	680	196	182	1,707	3,356	3,311	60.2	70.8	2,218	1,119	986	618
	8 mos.	1,556	43,345	48	44,091	38,831	4,737	5,510	608	5,299	5,470	1,525	1,508	14,437	27,611	26,879	62.6	69.2	16,480	7,539	7,064	5,556
Savannah & Atlanta	Aug.	144	339	....	355	341	37	39	2	61	55	19	15	132	256	220	72.1	64.7	99	44	47	71
	8 mos.	144	2,608	....	2,729	2,525	418	469	14	510	457	154	134	907	2,068	1,961	75.8	77.7	660	284	324	336
Seaboard Air Line	Aug.	4,147	10,555	1,257	12,762	12,476	1,734	1,931	214	2,267	2,488	693	450	4,700	9,843	10,177	77.1	81.6	2,919	1,240	1,554	1,547
	8 mos.	4,147	90,036	9,165	107,398	102,493	13,669	14,728	1,679	19,590	20,547	5,617	3,630	38,739	81,270	82,242	75.7	80.2	26,128	11,692	12,865	11,887
Southern Railway	Aug.	6,269	19,303	1,198	22,091	21,300	2,352	3,248	304	3,739	3,661	950	483	7,216	15,038	15,765	68.1	74.0	7,053	3,292	3,289	2,926
	8 mos.	6,269	158,269	7,423	178,925	164,301	23,040	24,246	2,528	30,369	28,522	7,600	3,911	56,855	124,087	122,161	69.4	74.4	54,838	24,790	25,267	23,176
Alabama Great Southern	Aug.	328	1,030	67	1,237	1,616	163	254	34	285	298	82	40	474	1,068	1,167	86.4	72.2	169	95	68	335
	8 mos.	328	9,707	371	11,190	10,302	1,947	1,965	282	2,602	2,442	656	323	3,935	9,659	9,360	86.3	90.9	1,531	781	487	31
Cinn., N. O. & Tex. Pac.	Aug.	337	2,911	137	3,245	2,826	575	574	69	693	695	223	80	849	2,394	2,393	73.8	84.7	850	392	596	304
	8 mos.	337	24,789	696	27,078	23,945	4,612	4,755	586	5,716	5,385	1,778	651	7,057	19,610	19,303	72.4	80.6	7,468	3,394	5,051	3,359
Georgia Southern & Fla.	Aug.	397	751	40	861	714	100	133	11	158	79	10	23	285	626	556	72.7	77.9	235	49	24	—67
	8 mos.	397	5,957	278	6,876	6,129	985	1,250	88	717	640	84	183	2,162	4,537	4,702	66.0	76.7	2,339	507	472	—340
New Orleans & Northeastern	Aug.	203	809	47	940	873	172	182	22	196	197	85	27	244	716	729	76.2	83.5	224	172	102	108
	8 mos.	203	6,891	266	7,749	7,638	1,588	1,460	180	1,611	1,583	673	216	2,053	6,093	5,758	78.6	75.4	1,656	1,163	810	826
Southern Pacific	Aug.	8,068	39,553	3,101	45,591	45,064	5,553	5,158	555	10,735	9,998	2,492	820	17,998	37,243	35,810	81.7	79.5	8,348	4,120	3,065	4,144
	8 mos.	8,069	331,750	18,792	371,680	333,190	42,844	41,044	3,954	80,661	73,687	19,705	6,456	140,323	287,348	269,740	77.3	81.0	84,331	42,446	33,689	29,653
Texas & New Orleans	Aug.	4,162	10,722	392	11,722	11,561	1,807	1,854	142	1,755	1,642	204	248	4,445	8,858	8,462	75.6	73.2	2,864	1,097	646	802
	8 mos.	4,164	87,465	2,481	94,854	89,377	15,397	14,827	1,567	13,483	12,690	1,575	2,039	34,644	70,451	67,747	74.3	75.8	24,403	10,002	5,433	4,205
Spokane International	Aug.	150	280	....	292	322	44	37	3	23	32	9	4	78	159	162	54.4	50.3	133	41	66	67
	8 mos.	150	2,348	....	2,420	2,645	363	471	26	206	262	84	40	604	1,299	1,562	53.7	59.1	1,121	480	444	462
Spokane, Portland & Seattle	Aug.	936	2,854	110	3,167	3,140	400	389	57	497	444	129	34	1,100	2,150	2,074	67.9	66.0	1,018	531	326	686
	8 mos.	936	20,729	683	22,898	21,011	3,593	3,502	479	3,784	3,607	1,027	278	8,170	16,790	16,134	73.3	76.8	6,108	2,606	2,853	2,575
Tennessee Central	Aug.	284	329	1	348	348	43	40	5	50	51	21	15	123	254	252	72.9	72.4	94	26	25	37
	8 mos.	284	2,640	4	2,752	2,639	343	330	42	411	391	173	138	977	2,062	1,993	74.9	81.1	690	187	184	150
Texas & Pacific	Aug.	1,831	4,740	438	5,855	5,885	746	802	99	1,069	991	280	214	2,580	4,971	4,718	84.9	80.2	884	367	215	474
	8 mos.	1,831	42,578	2,704	50,049	47,634	6,725	6,554	810	8,492	8,479	2,181	1,644	20,731	40,531	38,676	81.0	81.2	9,518	3,745	2,514	2,232
Texas Mexican	Aug.	161	270	....	297	279	59	59	6	31	30	11	13	95	221	224	74.4	80.2	76	36	14	—12
	8 mos.	161	2,273	....	2,522	2,572	471	459	46	268	265	91	100	733	1,765	1,674	70.0	65.1	757	304	145	238
Toledo, Peoria & Western	Aug.	239	669	....	694	647	86	80	8	49	46	13	50	171	396	363	57.0	56.1	298	131	92	90
	8 mos.	239	4,991	....	5,153	4,906	619	603	55	404	432	101	402	1,356	3,121	2,996	60.6	61.1	2,032	871	606	650
Union Pacific	Aug.	9,743	36,713	3,343	43,411	48,683	5,123	5,377	527	7,754	8,104	2,229	1,140	15,957	32,369	33,003	74.6	67.8	11,043	5,948	2,474	5,648
	8 mos.	9,748	297,957	19,498	342,090	318,951	41,703	43,087	4,574	65,258	60,071	17,470	9,938	120,526	255,811	241,883	74.8	75.8	86,279	48,090	23,005	22,528
Virginian	Aug.	608	3,784	....	3,937	4,389	433	428	70	682	572	285	60	807	2,124	1,996	54.0	45.5	1,813	937	1,121	1,371
	8 mos.	608	29,856	....	31,062	32,714	3,992	3,581	664	5,924	5,490	2,271	502	6,414	17,885	17,140	57.6	52.4	13,177	6,830	8,508	8,812
Wabash	Aug.	2,392	7,787	554	9,413	9,321	983	1,123	117	1,333	1,480	448	272	4,530	7,562	7,834	80.3	84.0	1,851	702	405	456
	8 mos.	2,392	69,072	3,467	80,408	72,481	9,703	8,670	1,038	11,668	11,532	3,580	2,782	37,248	64,983	60,355	80.8	83.3	15,425	5,255	3,894	2,728
Ann Arbor	Aug.	294	725	....	775	814	90	92	7	162	151	44	35	365	681	652	87.9	80.0	94	60	5	108
	8 mos.	294	5,778	....	5,924	5,780	720	631	52	1,282	1,244	333	276	2,909	5,383	5,150	90.9	89.1	541	450	—85	140
Western Maryland	Aug.	844	2,387	....	2,564	3,693	458	525	49	750	697	293	119	1,094	2,616	2,758	102.0	74.7	—52	Cr.49	264	784
	8 mos.	844	30,527	....	31,747	29,117	4,342	4,113	407	6,444	6,033	2,186	1,011	10,400	23,901	22,703	75.3	78.0	7,846	4,338	6,244	5,751
Western Pacific	Aug.	1,188	3,833	294	4,249	4,607	767	528	86	689	642	222	230	1,644	3,638	3,243	85.6	70.4	611	106	387	1,115
	8 mos.	1,188	33,082	1,597	35,619	32,978	4,456	4,636	649	5,543	5,374	1,737	1,936	12,819	27,194	26,000	76.3	78.8	8,426	3,526	4,267	4,280
Wisconsin Central	Aug.	1,031	2,472	33	2,654	2,911	386	330	43	439	355	110	109	1,133	2,208	2,089	83.2	71.7	447	217	7	539
	8 mos.	1,031	20,706	186	22,174	20,983	3,077	2,740	346	3,726	3,564	869	815	9,491	18,296	17,344	82.5	82.7	3,879	1,551	824	951

New Products Report



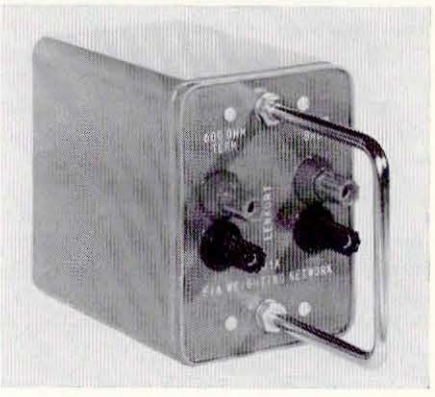
Shuntless Brushholder

The Ringsdorf brushholder features grooved split brushes and a rubber cushioned pressure finger. It is said to increase brush life because it provides constant pressure, eliminates brush changes and flashovers due to shunt troubles and reduces brush cost about 30%. Silver inlay provides positive brush contact. Holder boxes are demountable. *Pittsburgh Carbon Div., Ringsdorf Carbon Corp., Dept. RA, P. O. Box 22, East McKeesport, Pa.*



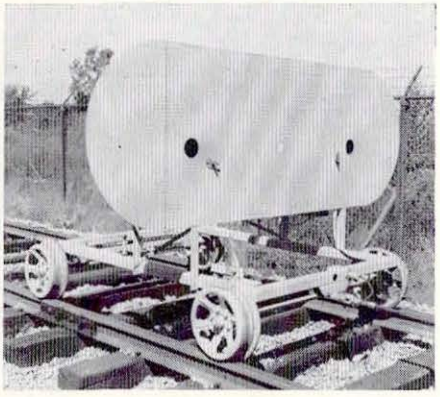
Loop Current Control

The type 238 loop current control is designed as a current normalizer in dc teleprinter signal loops. It automatically maintains loop current at the optimum value despite changes in loop resistance or supply voltage. Model 1 is for use in nominal 60 ma loops, and model 2 is for 20 ma loops. Both models incorporate a calibration control to allow variations from the design values. *Northern Radio Co., Dept. RA, 147 West 22nd St., New York 11.*



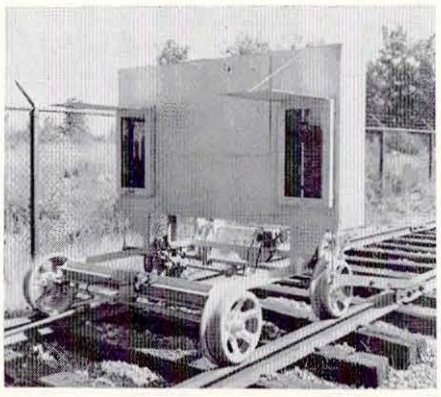
Voice Circuit Test Set

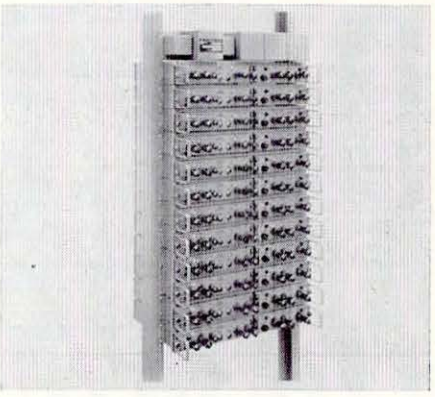
The type 601A weighting network adapts any good quality, high impedance, VTVM to read F1A curve-weighted noise measurements. A three-foot connecting cord with shielded banana plugs is furnished. The meter reading is subtracted from a calibration factor to obtain noise measurements in dba. The set provides an insertion gain of 10 db, and can measure noise as low as 10 dba. *Lenkurt Electric Co., Dept. RA, San Carlos, Cal.*



Electronic Track Raiser

Operation of a jack tamper is made completely automatic by use of the new Pullman-Standard electronic track raiser. Consisting of a projector unit (left) and a receiver unit (right), it utilizes a beam of light and photo-electric cells to raise track to perfect surface and cross-level. The projector unit operates on corrected track behind the receiver unit which sits on uncorrected track. The two units are connected to each other and the latter is connected to the tamper. When irregularities in track surface at the jacking station are encountered the photo-electric cells on the receiver unit are moved into the path of the light beam from the projector unit. This actuates the jacking mechanism of the tamper which continues until the cells are moved out of the light beam. A cam device on the receiver unit permits automatic "run-ons" and "run-offs." *Pullman-Standard, Dept. RA, 200 S. Michigan Ave., Chicago 4.*





Short Haul Trunk Carrier

The B-630 is a low cost short haul carrier telephone system providing up to 12 toll quality circuits between 40 and 416 kc. Also available is a fully transistorized amplifier designed as a one-way cable repeater to make up cable losses. Power for the pole-mounted repeaters is supplied over the carrier pair. The system uses an angular modulation principle. *Lynch Carrier Systems, Inc., Dept. RA, 695 Bryant St., San Francisco 7.*

New Consolidated Code Ready

► **The Story at a Glance: Railway operating conditions and methods change—and the operating rules are keeping pace. Effective Dec. 1, 14 western railroads will adopt a new Consolidated Code of Operating Rules. The 232-page book represents the first major upgrading of the rules since 1945 for eight of the lines involved. The other six are becoming parties to the Consolidated Code for the first time.**

Improvements in technology — dieselization and increased use of CTC and train radio, for example—account for many of the changes in the new code. One major revision: Rules in effect after Dec. 1 don't recognize the job of locomotive fireman.

Fourteen years of progress in railroading have been taken into account in a new rulebook which contains just 14 more pages than the old book it supercedes. But sweeping changes have been made. Old rules, appropriate to steam operation, have been dropped. In their place are new sections on CTC (Rules 265-273) and train radio (Rules 400-417). An indication of the amount of change made: One road's comparison of the new book to the 1945 code runs to 60 8½-by-11 inch pages.

Many revisions, major and minor, have been made in the interest of clarity. Others reflect the changes in railroad crew job descriptions which advancing technology has brought. Like C&O, which issued a revised rulebook last year, the Consolidated Code roads found it possible to cover engine crew rules without mention of the locomotive fireman.

The change is significant in view of U.S. roads' current efforts to win the same right Canadian roads now have: to assign firemen at management discretion on other-than-steam power and thereby begin the elimination of the fireman from freight and yard service. Under the new Consolidated Code, whatever place firemen occupied under the old code has been reassessed and reassigned along these lines:

- Rule 204 now provides that engineers must show copies of orders and clearances "to members of the crew on the engine." The 1945 code specified "firemen and when practicable . . . forward trainmen."
- Rule 211, pertaining to Clearance Form A, takes a similar slant in referring to "members of the crew" instead of "firemen and trainmen."
- New Rule 803 combines responsibility of enginemen and trainmen in observing signals, maintaining safety lookout, keeping abreast of orders. A new paragraph provides that: "When conditions or signals require that the train be stopped or speed of train be reduced, and the engineer or conductor fails to take proper action to do so, or should the engineer become incapacitated, other members of the crew must take immediate action to stop the train."
- The first part of old Rule 922 has been dropped (it covered duties of the firemen). Rewording of the rule provides that: "The engineer is responsible for the safe and efficient operation of the engine in his charge and all persons employed thereon must obey his instructions. Engineers must not permit any unauthorized person to handle the engine."

Several other rules touch on the fireman situation indirectly. One requires the head-end trainman to ride in the lead engine cab in freight service unless otherwise provided. Another requires signals to be given from the engineer's side of track, when practicable.

Other changes include the listing of rules for signalmen under the heading "Operators" in the 600 series; and the eliminating of separate headings and combining of several rules for agents and operators.

Employees of 14 companies will be bound by the new code: Milwaukee; Great Northern; Northern Pacific; Union Pacific (Oregon Division); Soo Line; Minneapolis & St. Louis; Davenport, Rock Island & North Western; Des Moines Union; Duluth, South Shore & Atlantic; Minneapolis, Northfield & Southern; Minnesota Transfer; St. Paul Union Depot; Spokane International, and Spokane, Portland & Seattle. Six of the 14 roads—M&StL, MN&S, DRI&NW, Des Moines Union, MT and St. Paul Union Depot—are becoming parties to the code for the first time.

North American, Emery Offer New TOFC Package

A new piggyback "package" will be offered to shippers who want to take advantage of low Plan IV TOFC rates between the city of Chicago and the Pacific Coast.

North American Car Corp. and Emery Transportation Corp. have set up a new company (North American-Emery Corp.) to provide the service. The TOFC package: An 85-ft flat car and two 40-ft insulated trailers with all-purpose mechanical refrigerator units.

Initially, North American will supply the cars and Emery the trailer units. Each will provide funds to purchase additional trailers that will be needed after that.

HAYES No Hayes Wheel Stop is bolted or clamped to the rail. Impact is absorbed by a lower projection pushing a tie in the ballast. The ballast provides gradual resistance, and the car is stopped without damage. Hayes Track Appliance Co., Richmond, Ind.

MARKET OUTLOOK *at a glance*

Carloadings Drop 3.2% Below Previous Week's

Loading of revenue freight in the week ended Oct. 31 totaled 588,148 cars, the Association of American Railroads announced on Nov. 5. This was a decrease of 19,199 cars, or 3.2%, compared with the previous week; a decrease of 86,843 cars, or 12.9%, compared with the corresponding week last year; and a decrease of 125,846 cars, or 17.6%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended Oct. 24 totaled 607,347 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, Oct. 24

District	1959	1958	1957
Eastern	89,254	95,887	106,300
Allegheny	87,789	113,393	132,623
Pocahontas	48,241	53,205	61,536
Southern	116,998	121,716	122,076
Northwestern	73,219	96,698	106,273
Central Western	135,796	137,715	125,033
Southwestern	56,050	56,231	49,847
Total Western Districts	265,065	290,644	281,153
Total All Roads	607,347	674,845	703,688
Commodities:			
Grain and grain products	67,205	66,268	46,217
Livestock	11,705	12,138	12,397
Coal	112,255	117,110	134,417
Coke	3,362	8,039	9,599
Forest Products	40,578	40,570	37,674
Ore	10,988	47,176	62,923
Merchandise l.c.l.	42,503	47,396	53,600
Miscellaneous	318,751	336,148	346,861
Oct. 24	607,347	674,845	703,688
Oct. 17	580,768	696,403	726,812
Oct. 10	558,780	686,521	741,520
Oct. 3	572,502	677,525	747,647
Sept. 26	587,079	673,380	739,266
Cumulative total, 43 weeks	25,624,208	24,901,471	30,055,905

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 24 totaled 9,009 cars, compared with 6,705 for the corresponding 1958 week. Loadings for 1959 up to Oct. 24 totaled 341,107 cars, compared with 221,554 for the corresponding period of 1958.

IN CANADA. — Carloadings for the seven-day period ended Oct. 21 totaled 87,857 cars, compared with 74,955 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
Oct. 21, 1959	87,857	27,955
Oct. 21, 1958	81,756	27,071
Cumulative Totals:		
Oct. 21, 1959	3,129,814	1,133,894
Oct. 21, 1958	3,052,975	1,137,116

New Equipment

FREIGHT-TRAIN CARS

► *Repair Ratio 0.1% Higher Than Last Year.*—Class I roads on Oct. 1 owned 1,695,267 freight cars, 42,058 less than a year ago, according to AAR report summarized below. Repair ratio was 0.1% higher than on Oct. 1, 1958.

	Oct. 1, 1959	Oct. 1, 1958	Change
Car ownership	1,695,267	1,737,325	—42,058
Waiting repairs	144,040	145,692	— 1,652
Repair ratio	8.5%	8.4%	+ 0.1%

LOCOMOTIVES

► *708 New Units Installed in First Nine Months.*—Class I railroads installed 708 new locomotive units (704 diesel-electric; four gas turbine-electric) in the first nine months of 1959, according to the AAR. In the corresponding period of 1958, they installed 338 units (335 diesel-electric; three gas turbine-electric). New locomotive units on order Oct. 1 totaled 229, of which 206 were diesel-electric and 23 gas turbine-electric. On Oct. 1, 1958, Class I railroads had 403 new locomotive units on order, of which 376 were diesel-electric and 27 were gas turbine-electric.

► *Locomotive Ownership and Condition.*—Class I roads owned or leased 28,165 diesel units on Oct. 1, an increase of 543 units over Oct. 1, 1958, according to AAR quarterly summary; steam locomotive ownership was reduced by 657.

	Owned or Leased Oct. 1		Stored Serviceable Oct. 1		Waiting Shops Oct. 1	
	1959	1958	1959	1958	1959	1958
Diesel (Units)	28,165	27,622	837	654	1,602	1,367
Steam (Locomotives)	875	1,532	338	561	446	540
Electric (Units)	541	559	68	50	85	85

New Facilities

► *Canadian Pacific.*—Ordered equipment from General Railway Signal Co. for the installation of 24 miles of CTC between Revelstoke and Taft, B.C. Control will be from a triple-decked track diagram control machine at Revelstoke, which will have capacity to handle traffic control on two subdivisions.

► *Chicago & North Western.*—Current construction projects involve expenditure of approximately $1,192,250. Major items in the program: Construction of mechanical and car department facilities, Beverly, Iowa, $198,105; two new yard offices, Proviso, Ill., $177,900; conversion from dc to ac current, Chicago, $143,810; revision of interlocking, Otis-Beverly, Iowa, $131,220; conversion to single main, Chittenden-Layton, Ill., $119,285.

► *Great Northern*—Signaling improvement program for 1960 includes installation of CTC over 200 miles of main line in eastern Montana; and extension of existing CTC between Delano and Wayzata, Minn..

James M. Symes
PRR

Allen J. Greenough
PRR

Park M. Roeper
PRR

A. Mosby Harris
PRR

Robert B. Oppenheimer
North American-Emery

Robert D. Innes
Electro-Motive Division

People in the News

ALASKA.—Russell R. Mack, chief clerk—operations, appointed assistant personnel officer, Anchorage. **Clarence Krause,** agent at Palmer, appointed traffic representative, Anchorage, succeeding **R. R. Hughes,** retired because of ill health.

ASSOCIATION OF AMERICAN RAILROADS.—Alfred P. Kivlin, chief engineer, Freight Loading and Container Bureau, Chicago, retired Sept. 1.

BALTIMORE & OHIO.—Thomas E. Reese, superintendent of mail traffic, Baltimore, retired Oct. 31.

CHESAPEAKE & OHIO.—C. B. Porter appointed general real estate agent, Huntington, W.Va., succeeding **R. O. Robertson,** who retired Oct. 31. Abolished position of assistant general real estate agent, formerly held by Mr. Porter. **M. E. Sandridge,** road foreman of engines—assistant trainmaster, Clifton Forge, Va., appointed supervisor diesel operation, Russell, Ky., succeeding **Homer Fuller,** retired. **C. H. Booker** appointed trainmaster, Alleghany subdivision, Clifton Forge, succeeding **J. W. Lilly,** retired.

Benson T. Buck and **Preston C. Shannon** appointed commerce attorneys at Detroit and Richmond, respectively. **Louis J. Matt** appointed administrative assistant to general counsel, Richmond.

CHICAGO & NORTH WESTERN.—Ray A. Kennard appointed mechanical and air brake instructor, Chicago.

E. Hector Coates appointed assistant director of real estate sales, Chicago. He was formerly director of sales for the Hotel Shoreland, Chicago.

COTTON BELT.—R. D. Klein, assistant industrial commissioner, Dallas, named manager of industrial development, Tyler, Tex., to succeed **H. H. Spragins,** who retired Nov. 1.

R. H. Hubbard named district freight and passenger agent, Shreveport, La.

ERIE.—Frederick M. Klitz, freight traffic manager, New York, appointed assistant vice president—freight rates at that point, succeeding **Eric C. Hallberg,** retired. **Herbert C. Well,** freight traffic manager, Chicago, transferred to New York. **Leonard M. Schukei,** assistant freight traffic manager, Chicago, succeeds Mr. Well. **Thomas Gilpin,** general freight agent, New York, replaces Mr. Schukei. **Edward R. Hilpp** appointed assistant general freight agent, New York, succeeding **Frank K. Noonburg,** who replaces Mr. Gilpin.

GREAT NORTHERN.—Joseph L. Tierney, district passenger agent, New York, appointed general agent, passenger department there, replacing **Henry Deissler,** retired. Mr. Tierney's successor is **H. Walter Heyer,** city passenger agent, New York.

GULF, MOBILE & OHIO.—W. A. Bender, assistant to vice president and general manager, Chicago, retired Oct. 1.

R. P. Tallman, southwestern traffic manager, New Orleans, La., appointed general freight traffic manager, Mobile, Ala., succeeding **John H. Walkmeyer,** who retired Oct. 31. **E. B. Kelly,** assistant freight traffic manager, New Orleans, succeeds Mr. Tallman. **H. W. Thomson** named assistant general freight agent (foreign department), Mobile. **W. T. Boardman,** manager foreign freight department, Mobile, retired Oct. 31. **D. F. McCullough,** general freight agent, New Orleans, succeeds Mr. Kelly.

MILWAUKEE.—Effective Nov. 1, **E. E. White** appointed assistant to traffic manager, Seattle, Wash., succeeding **J. H. Agner,** retired.

PENNSYLVANIA.—James M. Symes, president, appointed chairman of the board and chief executive officer, effective Nov. 1 (RA, Nov. 2, p. 10). **Allen J. Greenough,** vice president—transportation and maintenance, named president and chief administrative officer. **Park M. Roeper,** general manager transportation, succeeds Mr. Greenough. **A. Mosby Harris,** regional manager, Buckeye region Cincinnati, Ohio, replaces Mr. Roeper. **Howard C. Kohout,** assistant regional manager, Lake region, succeeds Mr. Harris.

Kenneth M. Lockerby, engineer, communications and signals, Pittsburgh region, Pittsburgh, named engineer, signals and catenary, Philadelphia, succeeding **Frank L. Chatten** (RA, Oct. 19, p. 39). **V. E. Wannag,** supervisor communications and signals, Baltimore, succeeds Mr. Lockerby. **J. A. Early,** supervisor, Pittsburgh, transferred to Baltimore. **P. V. Annania,** supervisor, Baltimore, appointed supervisor, Cincinnati, succeeding **G. F. Laser,** transferred to Pittsburgh. **R. C. Ryberg,** assistant supervisor, Canton, Ohio, appointed supervisor, Cleveland.

H. D. Morris named manager, special equipment, Philadelphia.

OBITUARY

Charles P. Fauntz, 79, retired assistant chief engineer, **Illinois Central,** died Oct. 24 at Clarksburg, W.Va.

V. J. Thompson, assistant vice president—operations, **Gulf, Mobile & Ohio,** Mobile, Ala., died Oct. 13.

Supply Trade

Robert B. Oppenheimer, manager of coordinated services, **North American Car Corp.,** has been elected president and general manager of the newly formed **North American-Emery Corp.**

Robert D. Innes, assistant director of public relations, **Electro-Motive Division** of **General Motors Corp.,** has been appointed director of public relations, to succeed the late **Volney B. Fowler** (RA, Oct. 12, p. 38).

William R. Hamilton, Jr., has been appointed research engineer of the **Rail Joint Co.,** Division of Poor & Company, New York, effective Nov. 1.

The **National Cylinder Gas Division of Chemetron Corp.** has announced appointment of seven special sales representatives to handle sales to railroads of NCG rail welding services and other railroad equipment and to supply certain NCG lines, including welding, cutting and other industrial equipment. Companies appointed and personnel are: **R. E. Bell Co.,** 2089 Railway Exchange Building, St. Louis—Richard E. and Richard H. Bell; **Eastern Railway Supplies, Inc.,** 110 E. 42nd Street, New York—John W. Samson, W. H. Bahrenbury and Harry A. Doyle; **Stan H. Haigh Co.,** 333 First Federal Building, St. Paul—Stan H., Jerry and Tom Haigh; **Donald J. Hogan & Company, Inc.,** 2754 Woodhill Road, Cleveland—D. J. Hogan, J. H. Callahan, J. F. Moran and J. M. Norton; **Stanley H. Smith & Co., Inc.,** 2754 Woodhill Road, Cleveland—Stanley H. Smith, E. H. Ricketts, J. J. Clark, J. B. Powell and J. M. Bina; **Southeastern Railway Supply, Inc.,** 2304 Wilson Blvd., Arlington, Va.—W. Conroy Wilson, J. B. Akers and Martin E. Perdue; **Don N. Roddy & Company,** 1031 14th Street, Denver—Don N. Roddy.

Charles W. Plunkett has been appointed operations manager for **Matisa Equipment Corp.** and its subsidiary **Matisa Railweld, Inc.** Mr. Plunkett was formerly operations manager of the latter company only. **Parker Hills** has been named superintendent of Matisa Railweld. **John Segala,** design engineer, has been appointed assistant to operations manager.

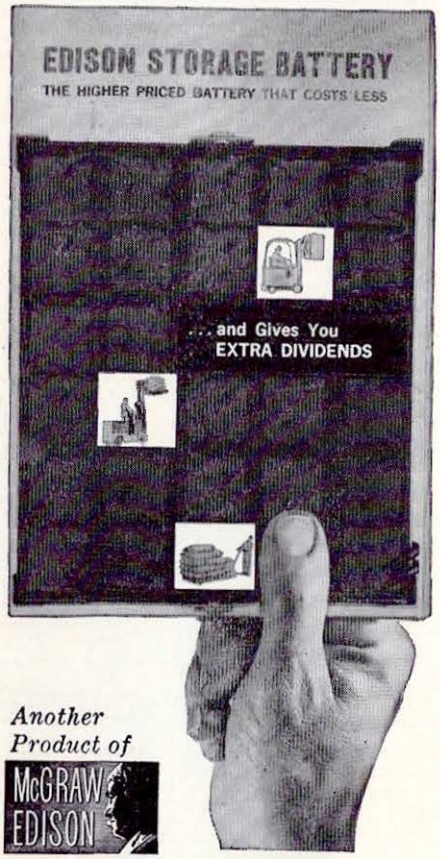
Glenn E. Stinson has been appointed sales engineer for **Union Switch & Signal—Division of Westinghouse Air Brake Co.** at the Chicago district office. After service with the **Rock Island** Mr. Stinson joined US&S as application engineer, Interlocking Section, Project Engineering Department, the position he held until his recent appointment.

NEW BOOK PROVES EDISON IS "THE HIGHER PRICED BATTERY THAT COSTS LESS"

SEND FOR IT NOW!

If you're looking for economy and superior performance, this new EDISON book **was written for you.** It tells and **proves** how an EDISON battery—through the years—**actually costs less.** Send for this book now. Write Storage Battery Division, Thomas A. Edison Industries, West Orange, New Jersey. In Canada: International Equipment Co., Ltd., 90 Bates Road, Montreal, P. Q.

EDISON Nickel Alkaline **STORAGE BATTERIES**



Another Product of McGRAW EDISON

'Mixed-Up Economy' Hit By CPR President Crump

A "mixed-up economy" ("part free enterprise, part socialist") affects transportation in both the U. S. and Canada, says Canadian Pacific President N. R. Crump.

In both countries, much of the capital allocated to transportation is by government edict and many of the prices charged for transportation are subject to government control, Mr. Crump told the annual meeting of the Delta Nu Alpha Transportation Fraternity in Pittsburgh, Oct. 31.

"This is the so-called mixed economy —part free enterprise, part socialist," he said. "It is surely a mixed-up economy and the amount of study being given to transportation in both our countries testifies to that."

He suggested that the market is a better mechanism for the allocation of capital to productive purposes than is government decree. "The market imposes a penalty for bad judgment and offers a reward for good judgment . . . The consumer exercises the discipline of the market."

Mr. Crump conceded that government must allocate capital to some transportation facilities that do not lend themselves to investment through private enterprise, but he said that government should be subject to the same discipline as private enterprise— the discipline of the consumer.

"If the consumer wants these facilities, let him pay for them as a consumer and not as a taxpayer. If government fails to impose user charges sufficient to cover capital costs as well as operating and maintenance expense, not only are these costs added to the taxpayers' burden, but private capital is driven away from investment in competing facilities; for it's a great handicap to compete against an enterprise that gets a substantial part of its capital at little or no cost."

Dividends Declared

DAYTON & MICHIGAN.—8% preferred, $1, quarterly, payable Jan. 5, 1960, to holders of record Dec. 15, 1959.

EAST PENNSYLVANIA.—$1.50, semiannual, payable Jan. 19, 1960, to holders of record Dec. 31, 1959.

ELMIRA & WILLIAMSPORT.—preferred, $1.62, semiannual, payable Jan. 4, 1960, to holders of record Dec. 18, 1959.

GREAT NORTHERN.—75¢, quarterly, payable Dec. 1 to holders of record Nov. 9.

ILLINOIS CENTRAL.—50¢, quarterly, payable Dec. 15 to holders of record Nov. 4.

MOBILE & BIRMINGHAM.—4% preferred, $2, semiannual, payable Jan. 2, 1960, to holders of record Dec. 1, 1959.

NORFOLK & WESTERN.—$1, increased; $1, extra, both payable Dec. 10 to holders of record Nov. 13.

READING COMPANY.—4% non-cumulative 1st preferred, 50¢, quarterly, payable Dec. 10 to holders of record Nov. 10.

Outside Or Inside ?

Chuck Bradley
Osmose Bridge Inspector

When we first got into this business of inspecting and treating older bridges, we thought it would be pretty much a matter of applying our preservative to the exterior surfaces.

True, this "outside" application is very important because we are able to knock out decay where original treatment has leached out or dissipated.

We soon found, though, that the biggest value of our service in many cases is locating hidden cavities inside the wood where original treatment did not penetrate and flooding these areas with our treatment. We know how to find these *inside* weak spots and what to do about them.

If you would like to look over one of our descriptive booklets, drop me a line.

Chuck Bradley

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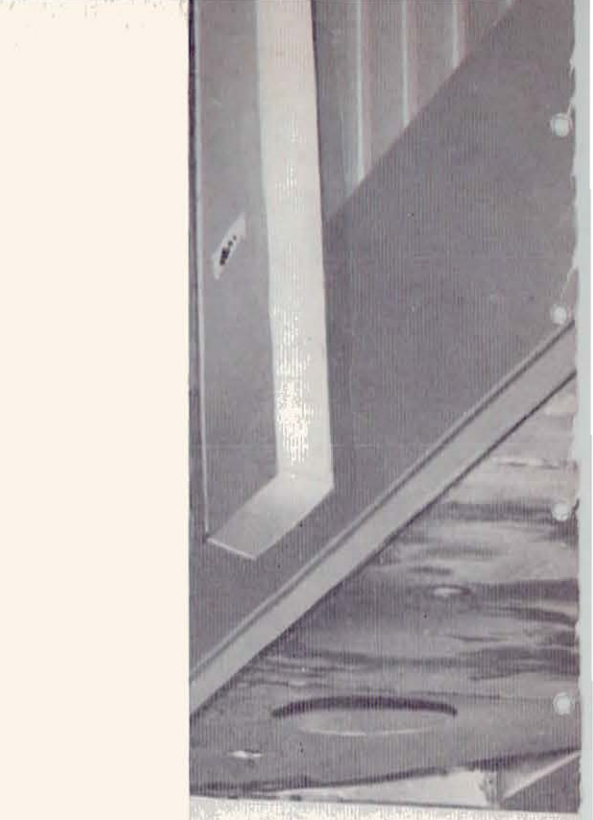
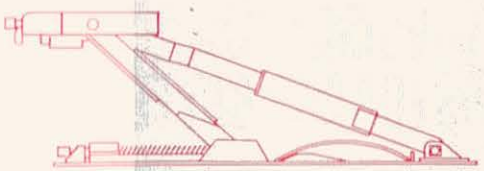
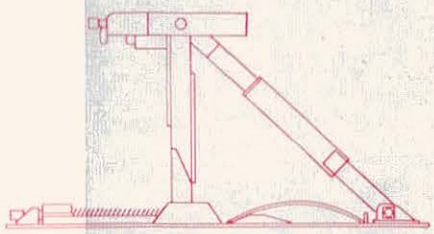
OF AMERICA, INC.
981 Ellicott St. Buffalo 9, N.Y.
Elmwood 5905

piggy-back business expanded when acf developed the retractable trailer-hitch







The development of this simple, low cost hitch has paved the way for the current expansion of piggy-back operations. Now, more ACF Retractable Trailer-Hitches are in service than all other tie-down methods combined! Proof of faster, surer, safer attachment . . . proof of ACF's contribution to the long-term profit picture of the nation's railroads.

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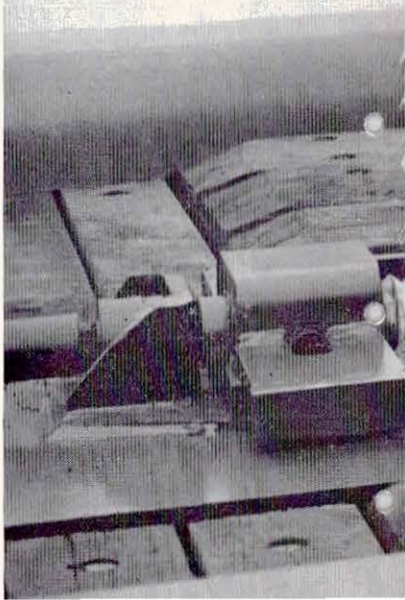
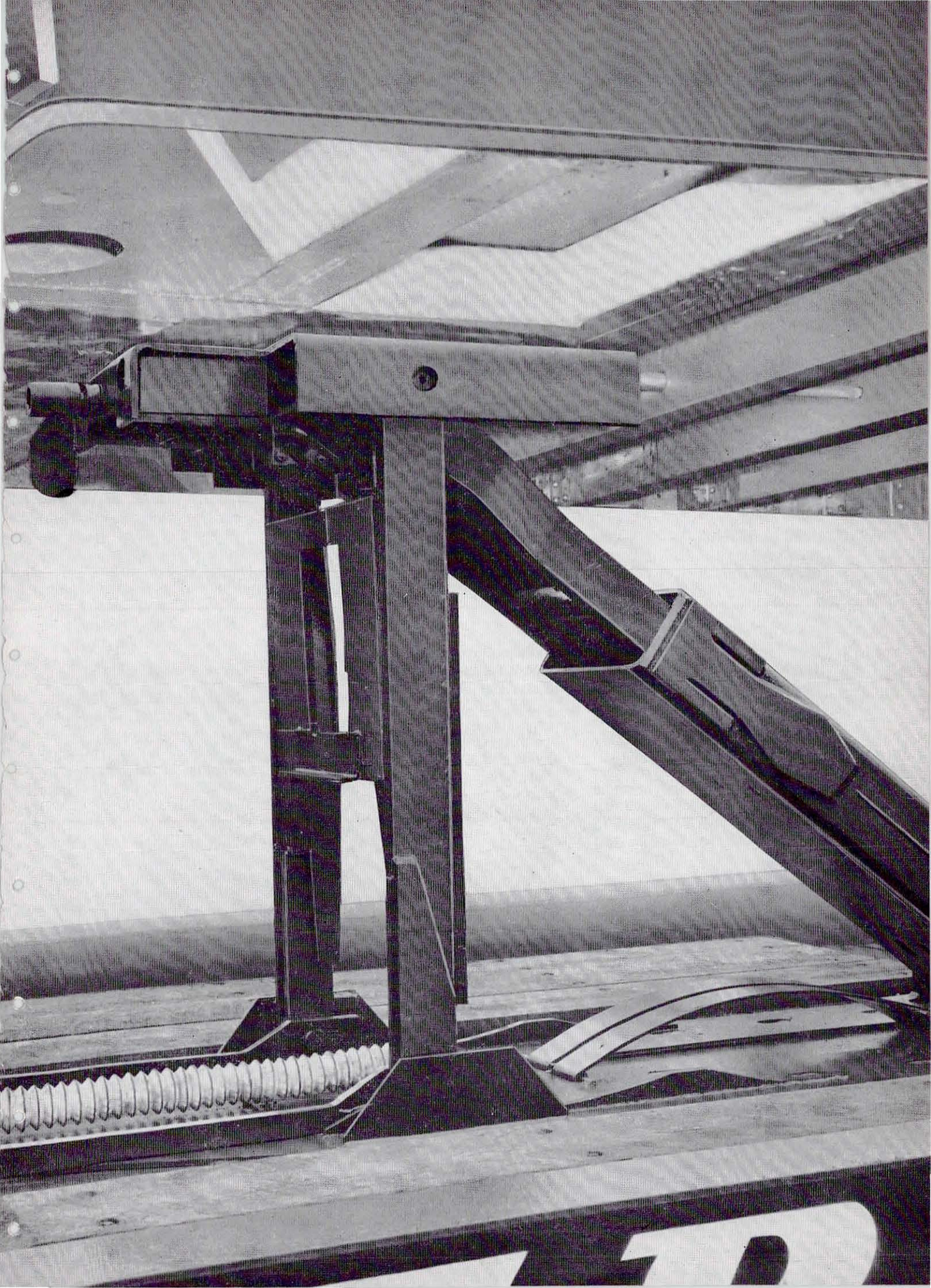




You Ought To Know...

An electronic device that uses train radio to provide closer control of slack movement in long freight trains has been tested on the M&StL. President A. W. Schroeder mentioned the test in a speech at Des Moines, Iowa. The device, which produced "encouraging results," is now back in the cooperating suppliers' labs for further study. A spokesman for one of the supply companies involved emphasized that the device, and the tests, are "strictly experimental at this time."

CTC will govern train operations on Southern Pacific's entire Los Angeles-El Paso main line (813 miles) by mid-1960. Another 75 miles of CTC will be in service east of El Paso by the same time. SP's most recent CTC installation: Mescal, Ariz., to Anapra, N. Mex.

Recall of 591 shopmen was announced last week by the Baltimore & Ohio. Object, said B&O President Howard E. Simpson, is to "speed up work on equipment needed to handle the freight traffic upsurge which will follow the end of the steel strike." This brings to 2,303 the number of mechanical employees recalled by the road since September.

The 6.57-mile Indiana Northern's physical properties were sold to the New Jersey, Indiana & Illinois (part of the Wabash system) effective Nov. 1. Purchase price: $90,000. The IN is a terminal switching road serving 12 industries at South Bend, Ind. Its former owner: The Oliver Corp., manufacturer of agricultural implements and machinery. IN has posted a loss every year since 1953, but NJI&I anticipates it can be operated profitably as an extension of an existing carrier already fully equipped to give identical services.

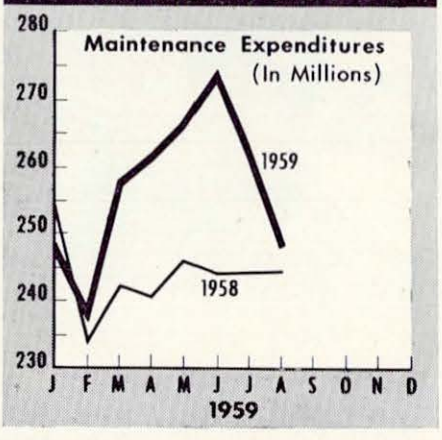
PRR's taxes per share last year amounted to $4.77—compared with net earnings per share of 27 cents, the road's vice president—finance, David C. Bevan, told an Altoona, Pa., audience. Mr. Bevan conceded that last year was "the second worst in our financial history," but added: "That does not alter the fact that a large chunk of the tax bill was on fixed plant, which our competitors get for free. It is a rare year indeed when taxes alone do not exceed earnings."

New president of the American Train Dispatchers' Association is R. C. Coutts, who moves into the top job after 12 years as an ATDA vice president. Mr. Coutts succeeds J. B. Springer.

Pre-fabricated track is being used almost exclusively in construction of the New York Central's new $12,500,000 Avon Yard at Indianapolis. All of Avon's 70 miles of track are being laid with panels and preassembled switches, with the exception of the hump and ladder tracks.

Santa-bound youngsters en route to a pre-Christmas tour of city stores are getting a break from Missouri Pacific—25-cent round-trip fares, applicable to nine MoPac cities on the three weekends before Thanksgiving and Christmas. Youngsters must be accompanied by adults—who may purchase round-trip tickets for the price of one-way fare. Reduced fares will apply to St. Louis, Kansas City, Houston, Beaumont, Omaha, Wichita, Memphis, Little Rock and San Antonio.

...And Watch



Passenger service began on Canadian National Railways' new branch between Chibougamau and St. Felicien, Que., Oct. 28. CNR President Donald Gordon was at the controls of the first train as it pulled into St. Felicien. The newly completed 133-mile stretch between St. Felicien and the Beattyville-Chibougamau line gives the Chibougamau mining center a short route to Quebec City and Montreal.

"A letter from 'the Old Man'" to all Delaware & Hudson Railroad employees was distributed last week by D&H President William White. Mr. White gave a straightforward account of "the railroad situation, the need for reducing our costs of doing business, the impossibility of increasing our freight rates without losing a lot more business [and] the jeopardy in which railroad employment is placed by wasteful practices." Stressing the point that the railroad industry, which includes all of its employees, is in the jaws of a dilemma, Mr. White's comments on work-rule changes concluded with the assurance "that railroad management asks only for a good day's work for a good day's pay."

Economic impact of the St. Lawrence Seaway in the Chicago area has not lived up to optimistic estimates. Earlier forecast of 250,000 new jobs in the area as a result of the waterway has been toned down to 38,000 (by 1965) by a new study made by three University of Illinois geographers. Normal growth of the Chicago industrial complex is expected to add 270,000 jobs over the same period. Actually, the survey points out, a major impact of the Seaway may come indirectly — through competition which will act to create lower rates for land transport media.

No more passengers will ride Western Pacific freight-train cabooses on the "Inside Gateway" route between Keddie and Bieber. Passengers have been permitted to ride the caboose on certain trains—but only 145 have done so since 1953. The California PUC authorized discontinuance of applicable tariffs effective Oct. 26.

99¢ BOOK SALE

FALL INVENTORY CLEARANCE

1 *Handbook of American Railroads*, by R. G. Lewis. Data on 113 Class I railroads, history, equipment data, maps, train photos. Originally $4.50. *Now only 99¢.*

2 *Diesel-Electric Locomotive Handbook*, 2 volumes. Comprehensive treatment of the modern diesel locomotive, design, mechanical and electrical equipment, operation, maintenance and service, trouble-shooting, combustion and lubrication. For engineers, firemen, mechanics, apprentices. Bought separately originally cost $5.50. Two-volume set complete, only 99¢.

3 *Roadway and Track*, by Walter F. Rench. Now somewhat dated, this book which describes and illustrates methods of roadway and track maintenance still contains a wealth of important and valuable information. Regular catalog price is $5.50. *Now, for a limited time, 99¢.*

4 *Routing and Misrouting of Freight*, by Glenn L. Shinn. Learn how to simplify complex routing problems. Rights and obligations of shippers and carriers explained. Defines correct method of tender to obtain lowest published rate. Regular price $4.75. *Now 99¢.*

5 *On Engines in Britain and France*, by P. Ransome-Wallis. Authentic, vivid, beautifully illustrated story of crack French and British trains. Detailed data on locomotive performance. 248 pp. 32 pp. of illustrations. Originally $5.50. *Now 99¢.*

6 *ABC's of Air Brakes*, by C. M. Drennan. Presents a clear explanation of train brake control, air brake fundamentals and a glossary of air brake terms. 256 pp. 200 illus. Published at $4.75. *Now special, limited-time price, 99¢.*

7 *Car Air Brakes*, by C. M. Drennan. Presents an intensive, self-contained, course in car air brake devices, freight car brakes and passenger car brakes. 160 pp. 100 drawings. 41 photos. Originally $4.75. *Now 99¢.*

8 *Locomotive Air Brakes*, by C. M. Drennan. Covers the subject in four exhaustive sections on locomotive devices, locomotive brake equipment, electro-pneumatic brake, and the speed-governor control. Originally $6.75. *Now 99¢.*

9 *Simplified Curve and Switch Work*, by Walter F. Rench. Presents a simplification of methods for solving curve and switch problems for trackmen. Regular list price $4.50. *Now only 99¢.*

10 *Track and Turnout Engineering*, by C. M. Kurtz, A practical handbook for railroad track engineers, transitmen and design draftsmen for the laying out of railroad turnouts and crossings. List price $5.50. *Now only 99¢.*

11 *Diesel-Electrics—How to Keep 'Em Rolling.* Presents the electrical fundamentals of diesel-electric locomotives in plain, non-technical language easily understood by any practical shop or maintenance man. For a limited time only, get your *copy for 99¢.*

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Unity Is Vital on Rules Issue

The proposals the railroads made last week to the operating unions, for modernizing the working rules in train and engine service, constitute the most comprehensive program the industry has ever undertaken to adapt itself to changed conditions. (RA, Nov. 2, p. 16.)

Adaptation to change is the price all living beings—and all organizations—must pay to survive. At one time the dominant animals on earth were giant reptiles. Climate and vegetation changed. Smaller and smarter animals appeared. The big lizards didn't change. They vanished.

Technologically, the railroads are still, by far, the most economical method of land transportation for all freight traffic (except very short and very light hauls); and for a substantial part of passenger movement.

But the railroads are not getting anything like the proportion of total traffic they could handle more economically than other forms of transportation. The reason is that, so far, railroads have not been able to adapt themselves to radically changed environment.

The handicaps to change that confront the railroads are all "institutional"—they are not economic or technological. What "institutional" handicaps mean is that laws, regulations and traditions are forcing the railroads to operate more in accordance with competitive conditions as they were in 1910, than as they are in 1959. These moss-grown "institutional" handicaps fall into four categories, as follows:

Institutional Handicap No. 1—Regulation—Railroads are regulated even more restrictively in 1959 than they were in 1910—and newer forms of transportation are regulated much less severely or not at all. To survive and prosper, railroads' regulation must be strictly equalized with that of all other transportation, including private transportation.

Institutional Handicap No. 2—Taxation—Railroads are the only form of transportation subjected to *ad valorem* taxation on fixed property. To survive and prosper, railroads must have equality with other forms of transportation in taxation of their plant.

Institutional Handicap No. 3—Capital Supply—To secure funds for renewal and improvement of their fixed plant, railroads must depend upon private investors and upon their net earnings. Other forms of transportation get practically unlimited supplies of fixed plant capital from the public treasury. For railroads to survive and prosper, as private enterprise, it is essential that private enterprise principles (self-support, rather than support by taxpayers) be extended to govern the supply of capital to other forms of transportation. (While this transition is being effected, "stop-gap" expedients, such as accelerated depreciation and exemption from income taxation of reinvested earnings, are essential.)

Institutional Handicap No. 4—Antiquated Working Rules—Whatever the leaders of the railway operating brotherhoods may say for public consumption in defense of present working rules, these gentlemen know, and all other informed railroaders know, that these rules are as out-of-date as a horsedrawn buggy. To survive and prosper, railroads must have working rules no more onerous than those obtaining in competing forms of transportation.

•

Of the four kinds of institutional handicaps which are bogging down railroad prosperity and growth, it is No. 4—Antiquated Working Rules, which deserves top priority within the railroad industry. This is because this particular handicap can be removed by railroad men themselves—management and unions. Management's position in seeking to moderate these suicidal rules is necessary to protect the industry's traffic and future employment—hence is "pro-labor."

It is, of course, perfectly possible for informed railroad men to have differing private opinions as to the relative importance of the many proposed rules changes. But it is not individual railroad people who have the responsibility for negotiating these rules changes to a successful conclusion. That responsibility has been laid upon managements' conference committees in the three regions. These negotiators cannot do their job effectively without the loyal support of every informed railroader for the program as a whole.

Are you, Mr. Railroader, a part of "the railroad problem," or a part of the answer to that problem? Your understanding of, and attitude toward, this working rules issue provides the answer to that question.

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